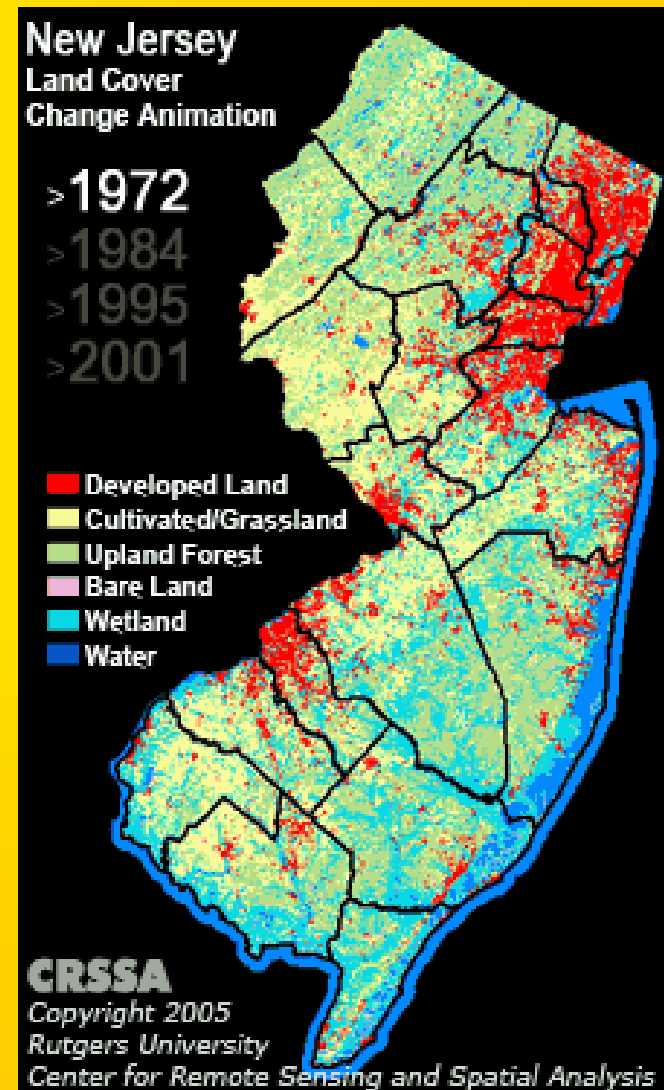


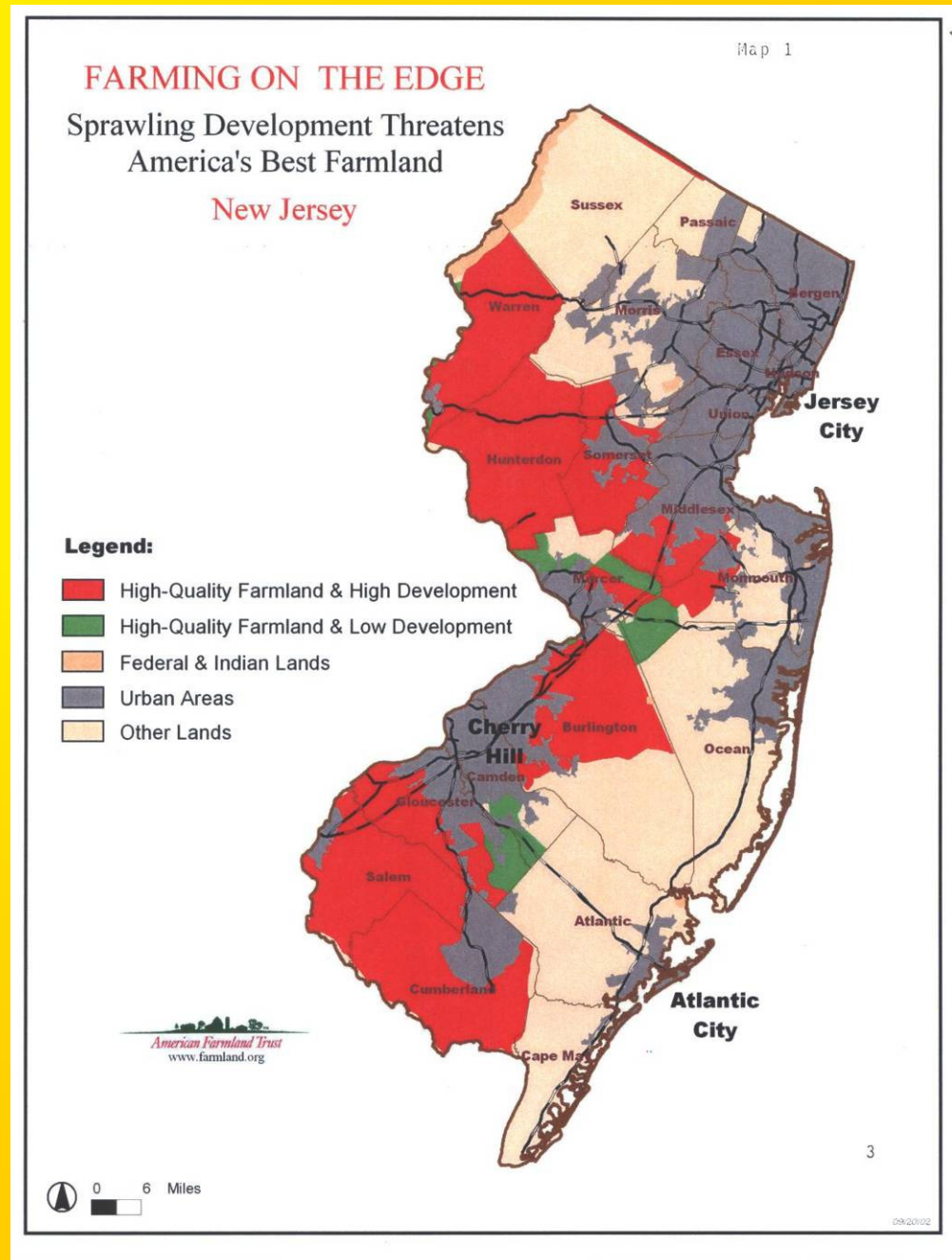
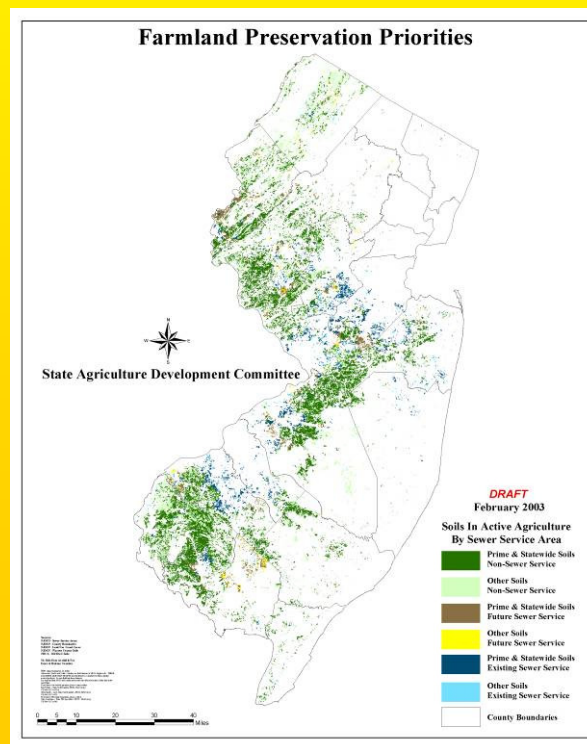
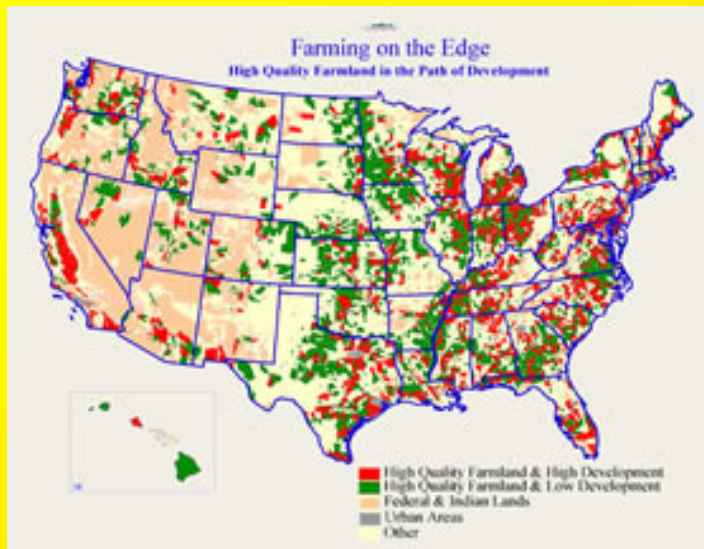
# Recent Trends Impacting Farmland Preservation

- ❖ Population
- ❖ Housing
- ❖ Employment
- ❖ Land Use
- ❖ Building Permits
- ❖ Regional Planning
- ❖ Farmland Availability

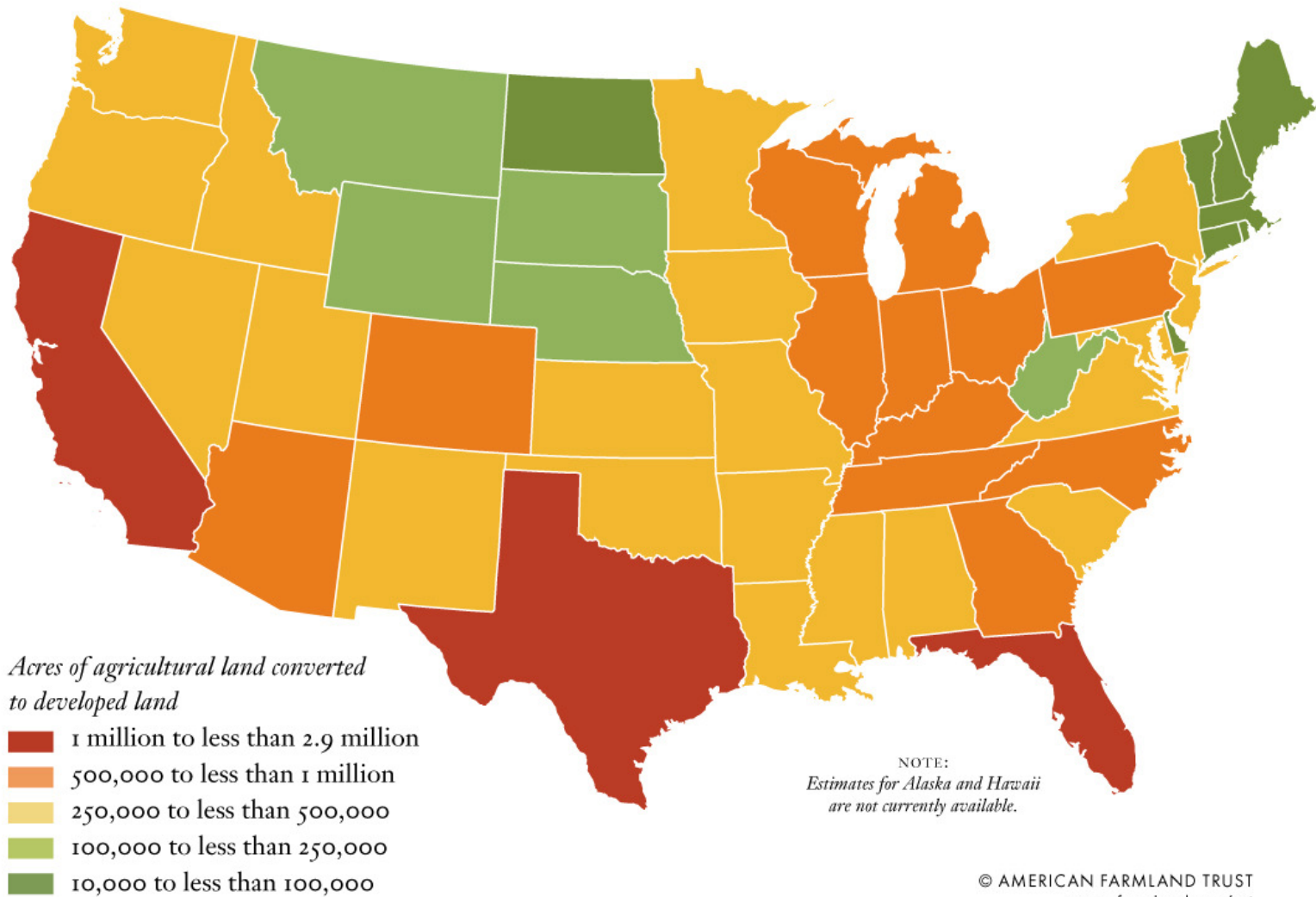
SADC Appraisers Conference  
Mercer County Community College  
June 8, 2011

Timothy A. Brill, PP, AICP  
SADC Planning Manager

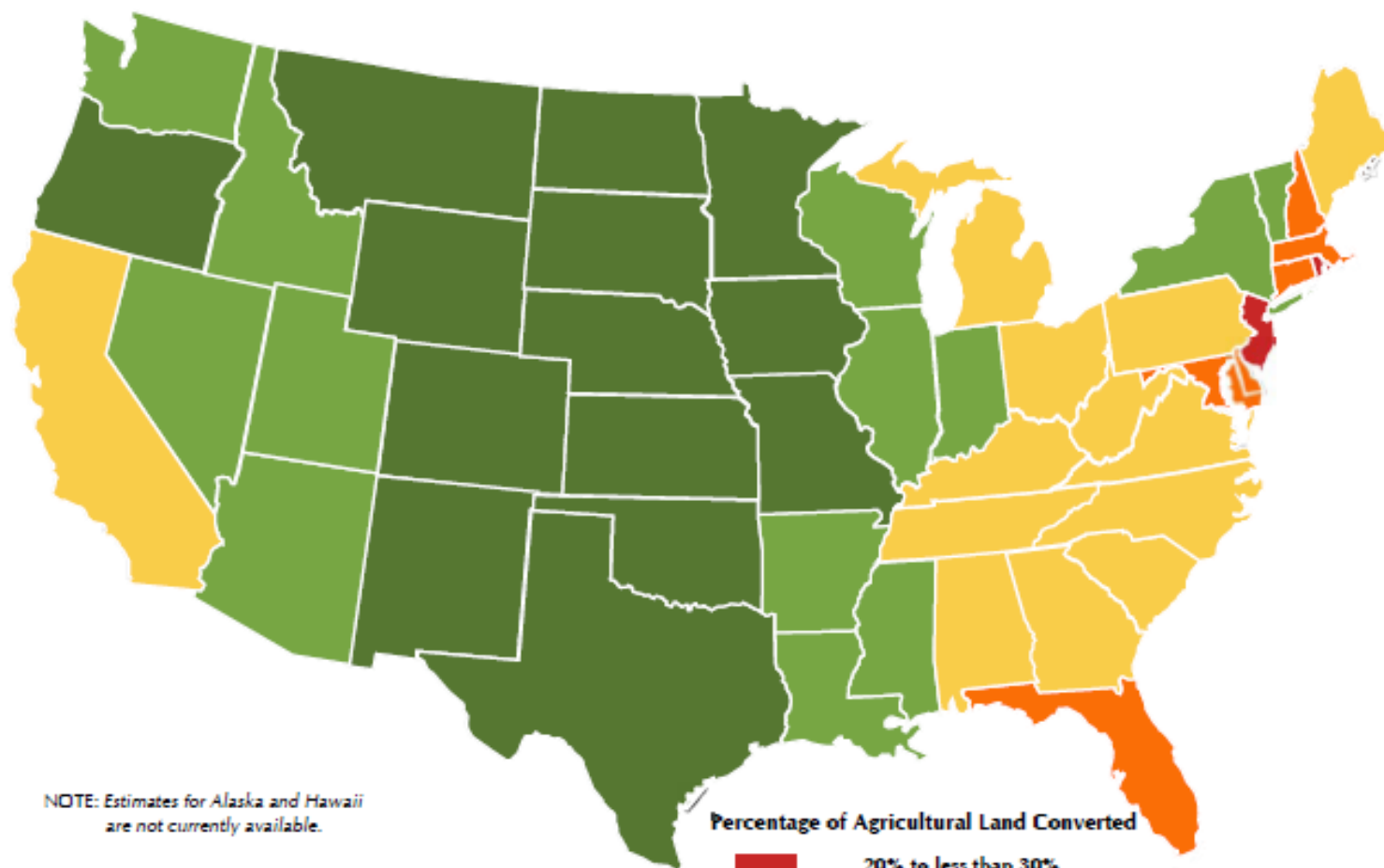




## Every state lost agricultural land.



### Percentage of Agricultural Land Converted to Developed Land, 1982 to 2007



NOTE: Estimates for Alaska and Hawaii are not currently available.

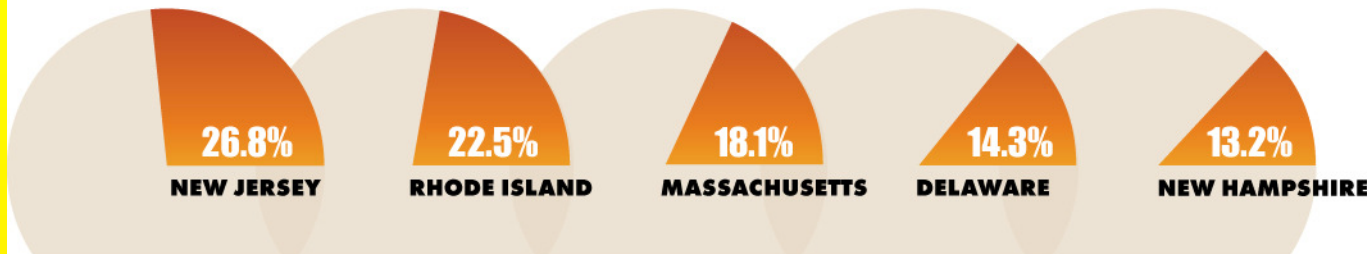


Compiled by the Farmland Information Center using estimates from USDA NRCS, 2007 National Resources Inventory

#### Percentage of Agricultural Land Converted

- 20% to less than 30%
- 10% to less than 20%
- 5% to less than 10%
- 2% to less than 5%
- 0.2% to less than 2%

## States that developed the largest percentage of their agricultural land:



Source: USDA NRCS National Resources Inventory, 1982-2007

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www.farmland.org/nri

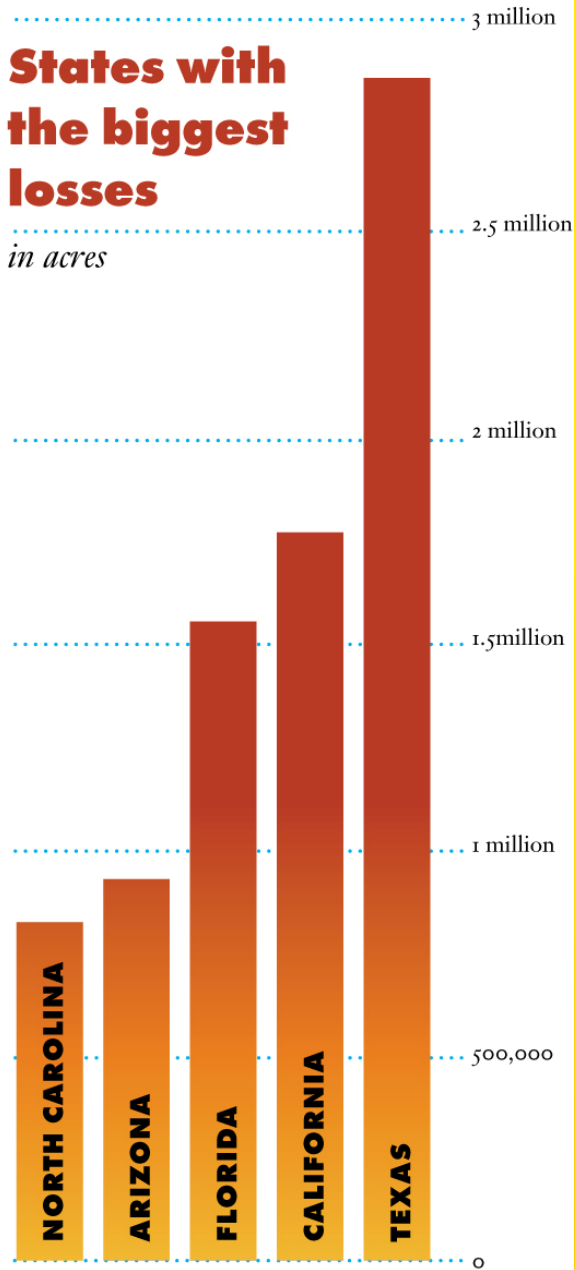
## States that preserved the largest percentage of their agricultural base:

<u>State</u>	<u>Percentage Preserved</u>	<u>Acres Preserved</u>	<u>Ag Base</u>
<b>New Jersey</b>	<b>24.9%</b>	<b>182,953</b>	<b>733,450</b>
Delaware	18.4%	93,935	510,253
Maryland	16.9%	347,637	2,051,756
Massachusetts	12.4%	64,018	517,879
Vermont	10.6%	130,748	1,233,313

Sources: American Farmland Trust, Status of State Programs, June 2010  
USDA Census of Agriculture, Land in Farms, 2007

## States with the biggest losses

*in acres*



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## BRIGHT SPOTS

These states protected the most agricultural land in comparison to the acreage they converted to development.

### ACRES PROTECTED FOR EVERY ACRE DEVELOPED

<b>Vermont</b>	<b>3.04</b>
<b>Maryland</b>	<b>1.42</b>
<b>Delaware</b>	<b>1.06</b>
<b>Connecticut</b>	<b>0.71</b>
<b>Massachusetts</b>	<b>0.70</b>

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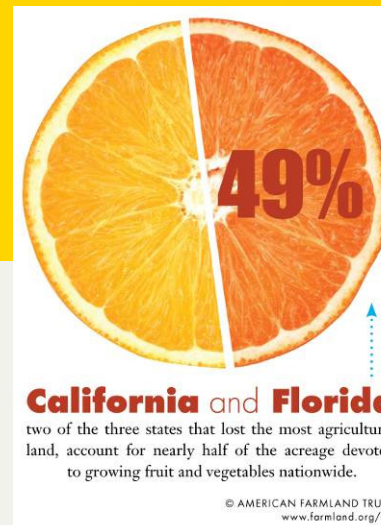
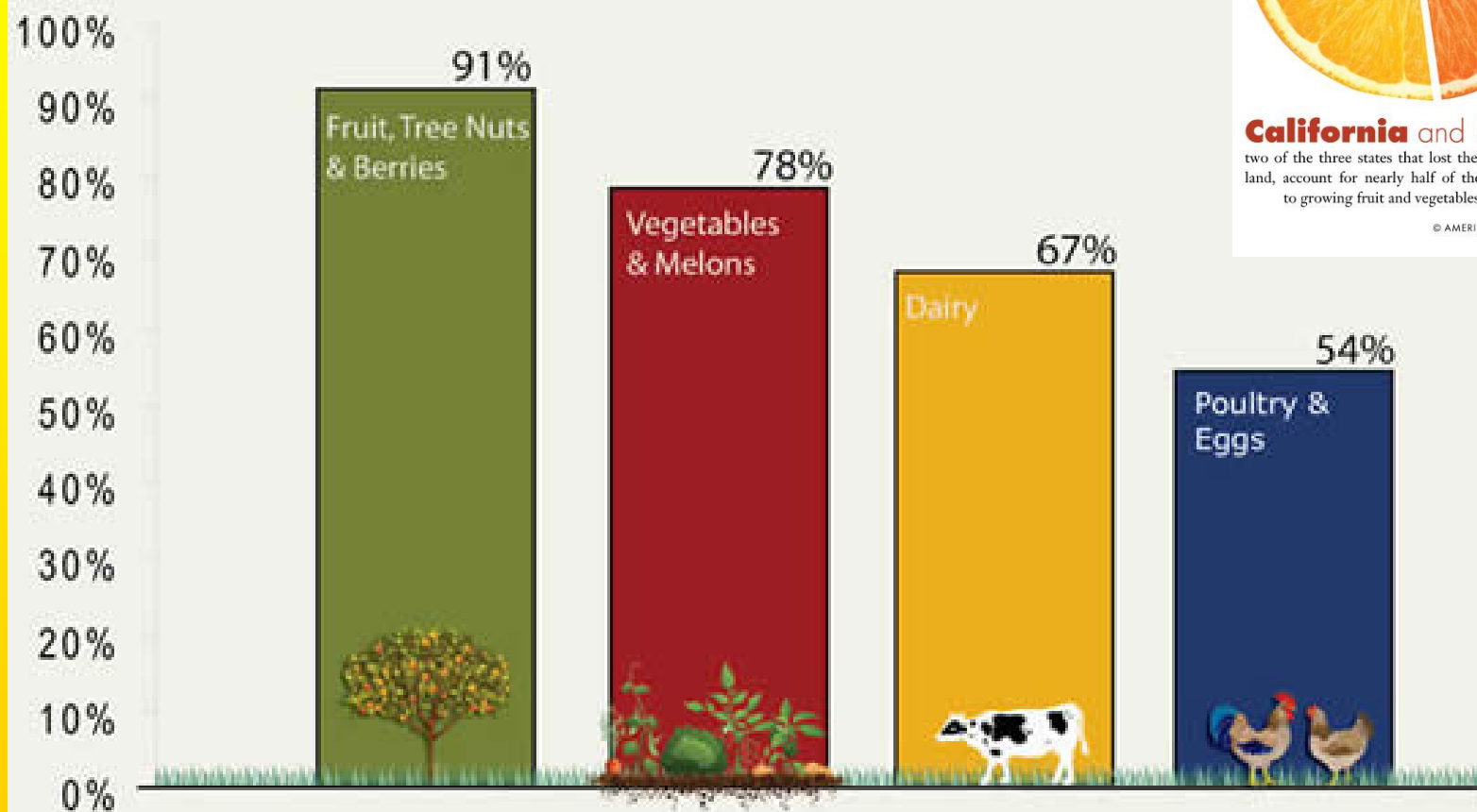
... and, also as of 2007:

Colorado	0.61
<b>New Jersey</b>	<b>0.58</b>
Pennsylvania	0.55



## Growing Local

### FRESH FOOD GROWN ON THE URBAN FRINGE



\*Market value of agricultural products by county supplied by USDA National Agricultural Statistics Service from the 2007 Census of Agriculture.  
"Urban influenced counties" are those assigned a 2003 Urban Influence Code of 1, 2, 3, 4 or 5 by the USDA Economic Research Service.

A NATIONAL VIEW OF AGRICULTURAL EASEMENT PROGRAMS:  
PROFILES AND MAPS — REPORT 1

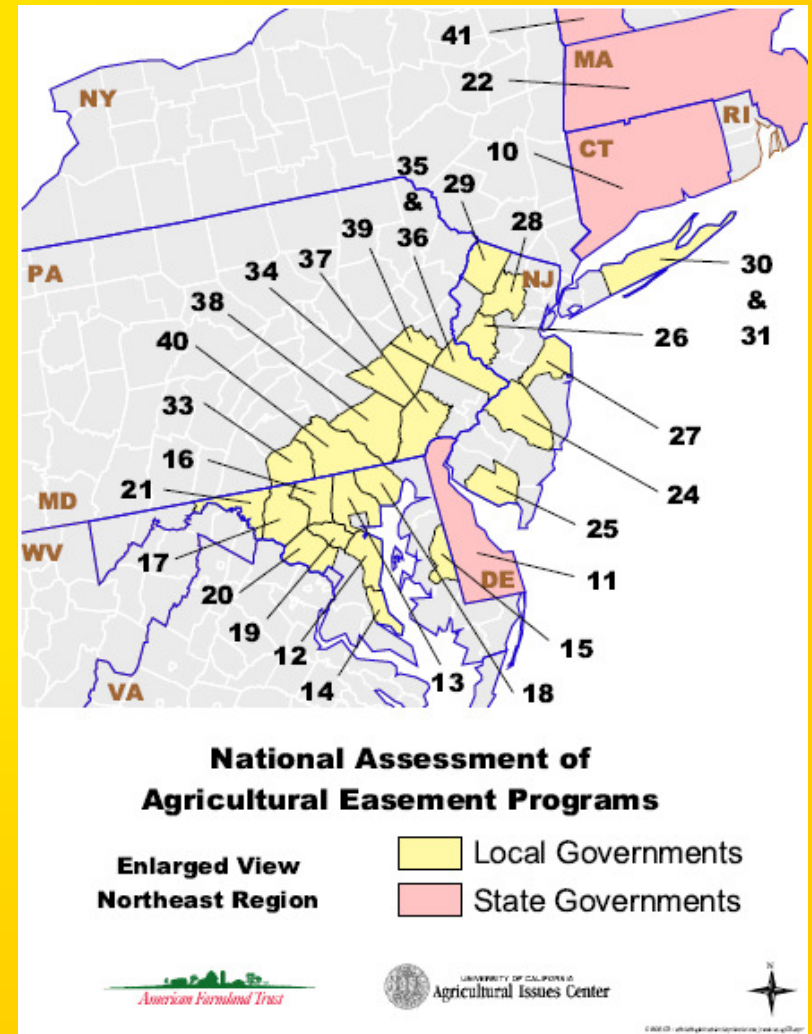
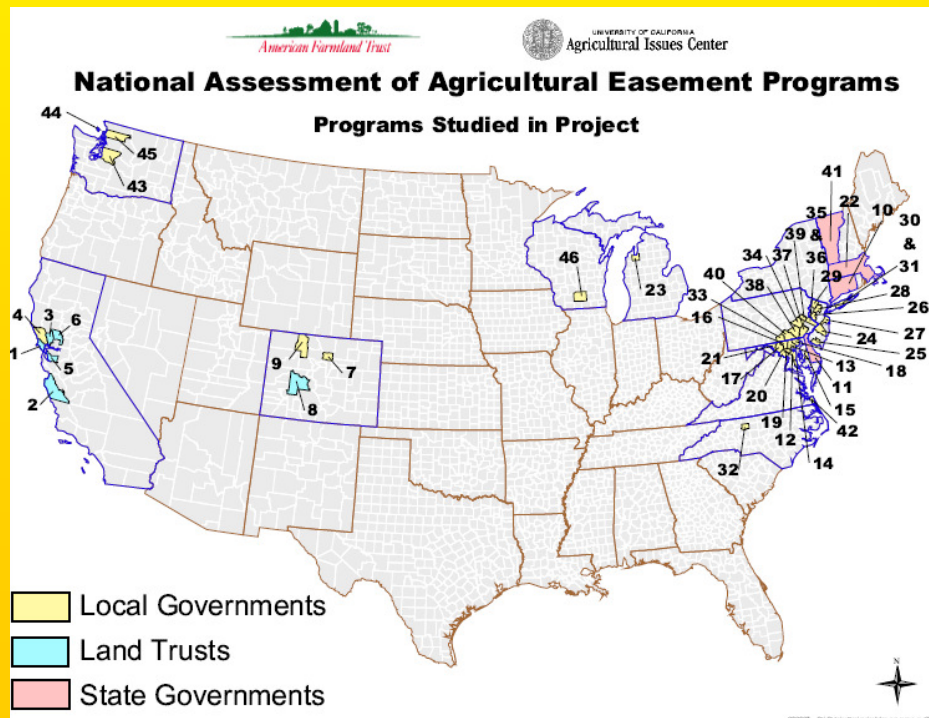
SEPTEMBER 2003

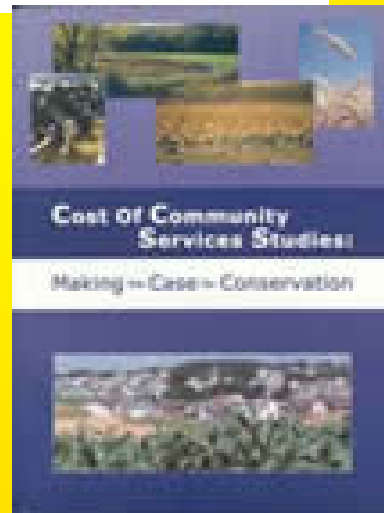
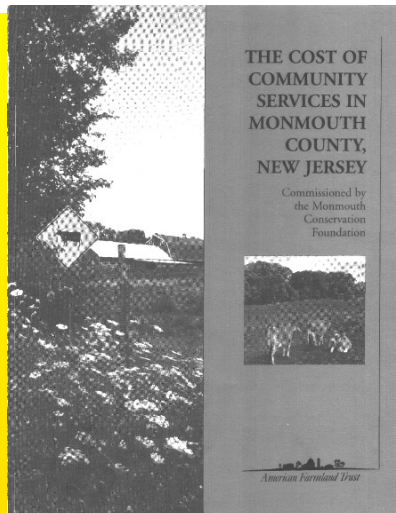
A JOINT PROJECT OF  
AMERICAN FARMLAND TRUST AND  
AGRICULTURAL ISSUES CENTER

Edited by:  
Alvin D. Sokolow, University of California, Agricultural Issues Center, Davis, California  
Anita Zurburg, American Farmland Trust, Center for Agriculture in the Environment, DeKalb, Illinois

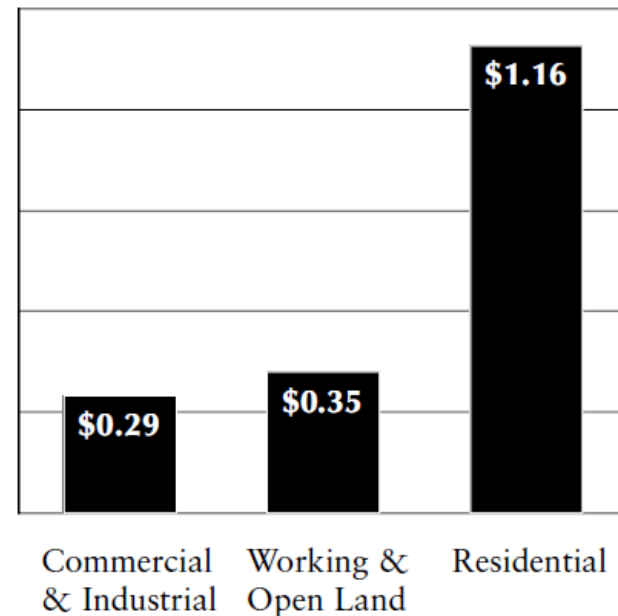
Publication supported by Farm Foundation

  
American Farmland Trust  
SAVING THE LAND THAT FEEDS US





### Median COCS Results

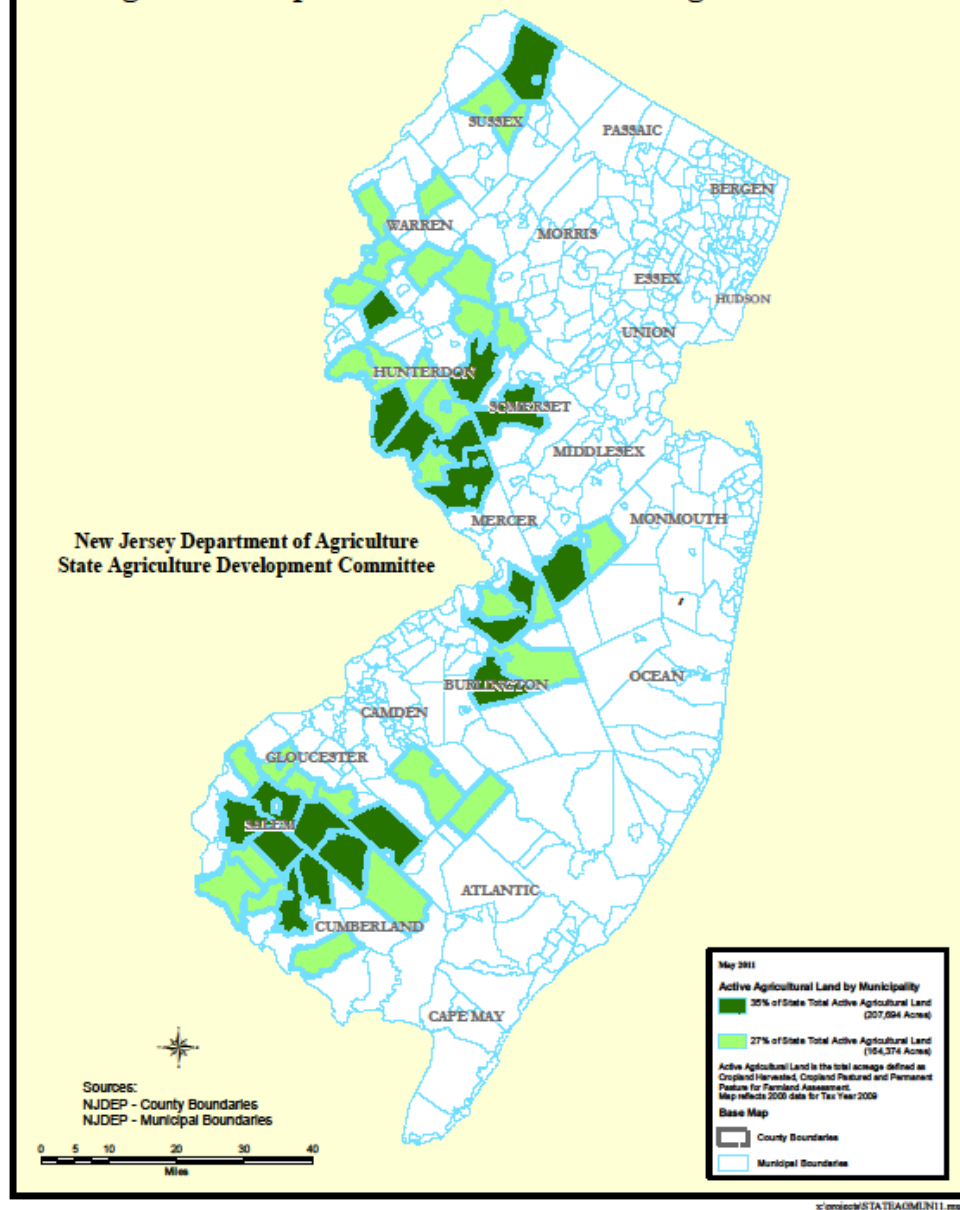


*Median cost per dollar of revenue raised to provide public services to different land uses.*

### SUMMARY OF COST OF COMMUNITY SERVICES STUDIES, REVENUE-TO-EXPENDITURE RATIOS IN DOLLARS

New Jersey Community	Residential including farm houses	Commercial & Industrial	Working & Open Land	Source
Freehold Township	1 : 1.51	1 : 0.17	1 : 0.33	AFT 1998
Holmdel Township	1 : 1.38	1 : 0.21	1 : 0.66	AFT 1998
Middletown Township	1 : 1.14	1 : 0.34	1 : 0.36	AFT 1998
Upper Freehold Township	1 : 1.18	1 : 0.20	1 : 0.35	AFT 1998
Wall Township	1 : 1.28	1 : 0.30	1 : 0.54	AFT 1998

### Highest Municipal Concentrations of Active Agricultural Land



### 2008/2009 Farmland Assessment Active Agricultural Acreage

• Cropland Harvested	473,875
• Cropland Pastured	36,210
• Permanent Pasture	89,192

Active Ag Subtotal 599,277

State Total for Ag Use 992,405

### Top 20 Municipalities

Active Ag Subtotal 207,694  
% of State Active Ag Total 35%

### Next 30 Municipalities

Active Ag Subtotal 164,374  
% of State Active Ag Total 27%

### Top 50 Municipalities

Active Ag Subtotal 372,068  
% of State Active Ag Total 62%

# Population

## 1990 - 2010 Census Data

### New Jersey

- Total Population Growth from 1990 to 2010 was 1,061,706 or 13.7%
- NJ Population Increased 377,544 or 4.5% from 2000 to 2010
- 2000 – 2010 Rate of Growth was Half of 1990 – 2000 Rate of 8.9%
- NJ Population Percentage Change was Significantly Lower than the National Rate of Change for both the 2000 – 2010 Time Frame (9.7%) and the 1990 – 2000 Time Frame (13.2%)

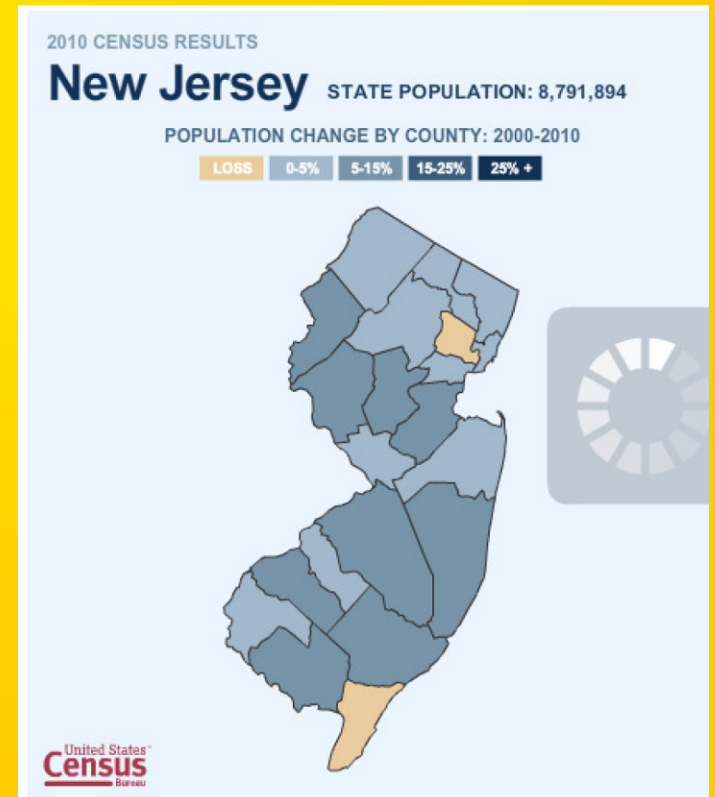
### Top NJ Counties

### % Change 1990-2010

- |                     |         |
|---------------------|---------|
| • Somerset County   | + 34.6% |
| • Ocean County      | + 33.1% |
| • Gloucester County | + 25.3% |
| • Atlantic County   | + 22.4% |
| • Middlesex County  | + 20.6% |

### Top NJ Municipalities

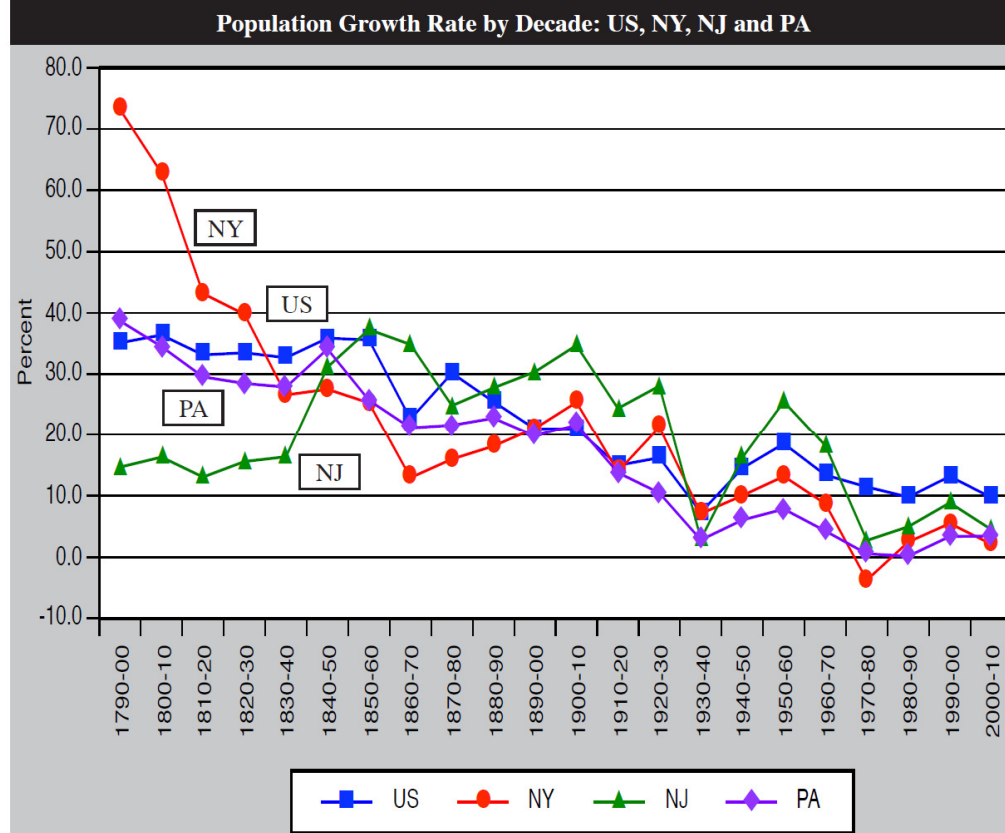
- |                               |          |
|-------------------------------|----------|
| • Woolwich Township           | + 599.1% |
| • Teterboro Borough           | + 204.5% |
| • Greenwich Township (Warren) | + 200.8% |
| • Harrison Township           | + 163.4% |
| • Robbinsville Township       | + 134.6% |



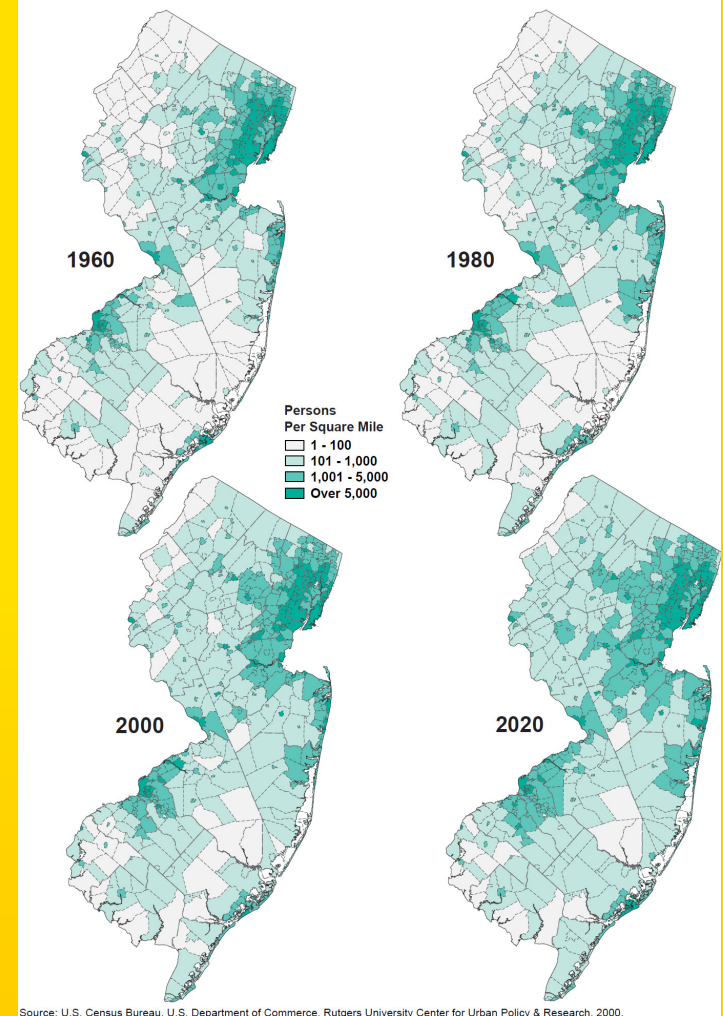
# Population

## 1790 - 2010 Census Data

Chart 1



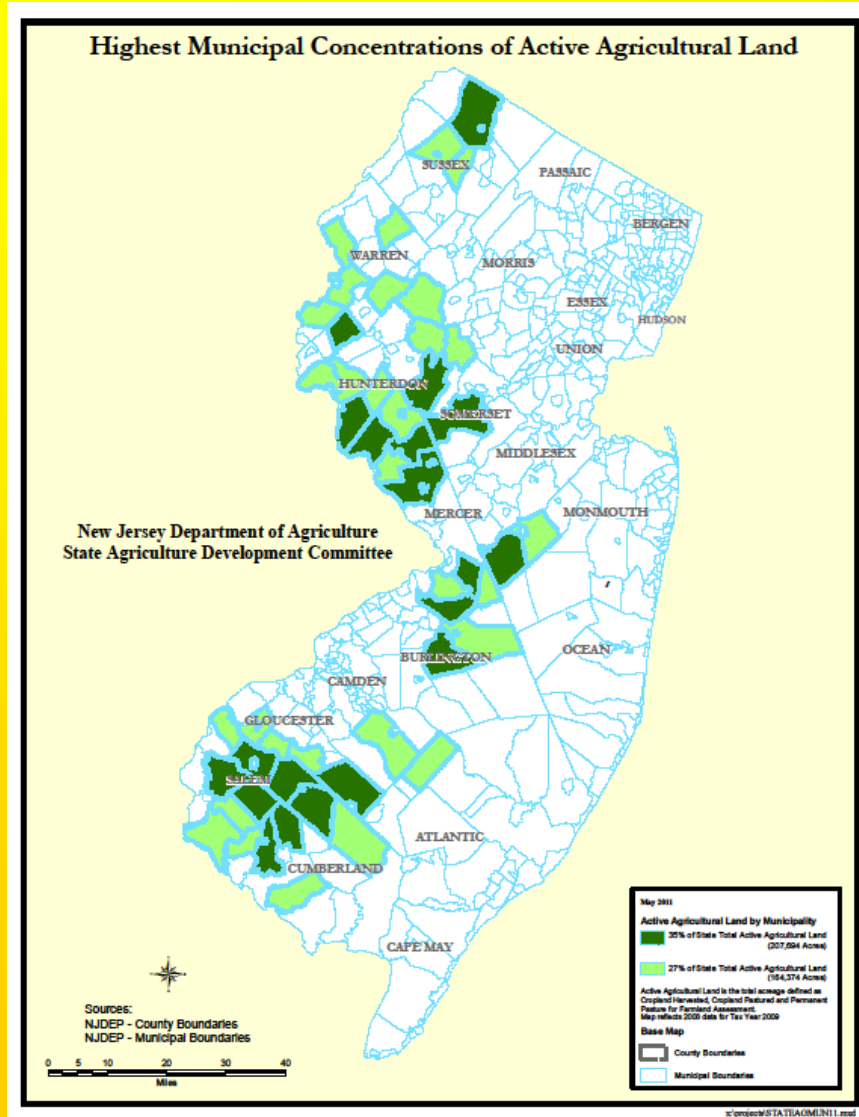
**Population by Municipality**



## Population for the Counties in New Jersey 1990, 2000 and 2010, Ranked by Percentage Change 1990-2010

Geographic area	Population			Population Change					
	2010	2000	1990	1990 to 2000		2000 to 2010		1990 to 2010	
				Number	Percent	Number	Percent	Number	Percent
<b>NEW JERSEY</b>	<b>8,791,894</b>	<b>8,414,350</b>	<b>7,730,188</b>	<b>684,162</b>	<b>8.9%</b>	<b>377,544</b>	<b>4.5%</b>	<b>1,061,708</b>	<b>13.7%</b>
<b>COUNTY</b>									
Somerset County	323,444	297,490	240,279	57,211	23.8%	25,954	8.7%	83,165	34.6%
Ocean County	576,567	510,916	433,203	77,713	17.9%	65,651	12.8%	143,364	33.1%
Gloucester County	288,288	254,673	230,082	24,591	10.7%	33,615	13.2%	58,206	25.3%
Atlantic County	274,549	252,552	224,327	28,225	12.6%	21,997	8.7%	50,222	22.4%
Middlesex County	809,858	750,162	671,780	78,382	11.7%	59,696	8.0%	138,078	20.6%
Hunterdon County	128,349	121,989	107,776	14,213	13.2%	6,360	5.2%	20,573	19.1%
Warren County	108,692	102,437	91,607	10,830	11.8%	6,255	6.1%	17,085	18.7%
Morris County	492,276	470,212	421,353	48,859	11.6%	22,064	4.7%	70,923	16.8%
Hudson County	634,266	608,975	553,099	55,876	10.1%	25,291	4.2%	81,167	14.7%
Sussex County	149,265	144,166	130,943	13,223	10.1%	5,099	3.6%	18,322	14.0%
Monmouth County	630,380	615,301	553,124	62,177	11.2%	15,079	2.5%	77,256	14.0%
Cumberland County	156,898	146,438	138,053	8,385	6.1%	10,460	7.1%	18,845	13.7%
Burlington County	448,734	423,394	395,066	28,328	7.2%	25,340	6.0%	53,668	13.6%
Mercer County	366,513	350,761	325,824	24,937	7.7%	15,752	4.5%	40,689	12.5%
Passaic County	501,226	489,049	453,060	35,989	7.9%	12,177	2.5%	48,166	10.6%
Bergen County	905,116	884,118	825,380	58,738	7.1%	20,998	2.4%	79,736	9.7%
Union County	536,499	522,541	493,819	28,722	5.8%	13,958	2.7%	42,680	8.6%
Cape May County	97,265	102,326	95,089	7,237	7.6%	-5,061	-4.9%	2,176	2.3%
Camden County	513,657	508,932	502,824	6,108	1.2%	4,725	0.9%	10,833	2.2%
Salem County	66,083	64,285	65,294	-1,009	-1.5%	1,798	2.8%	789	1.2%
Essex County	783,969	793,633	778,206	15,427	2.0%	-9,664	-1.2%	5,763	0.7%

# Population



## Top Active Agriculture Municipalities

% Change 1990-2010

### Top 20 Municipalities

- Upper Freehold Township + 110.6%
- Chesterfield Township + 49.4%
- Hopewell Township (Mercer) + 49.3%
- Hillsborough Township + 33.0%
- Franklin Township (Warren) + 32.1%

### Next 30 Municipalities

- Woolwich Township + 599.1%
- Mansfield Township (Burlington) + 120.5%
- Millstone Township + 108.4%
- West Amwell Township + 108.4%
- South Harrison Township + 64.8%

# Housing

**Illis Mill Estates**

**BUILD YOUR CUSTOM TEAM HOME HERE!**

ASK ABOUT HUGE INCENTIVES

OUR PLANS OR OUR PLANS  
1+ ACRE HOMESITES  
FREE FINISHED BASEMENT  
STARTING AT **\$349,900<sup>00</sup>**



Annual Estimates of Housing Units for Counties in New Jersey: April 1, 2000 to July 1, 2009													
County FIPS	Geographic Area	Housing Unit Estimates										April 1, 2000	
		July 1, 2009	July 1, 2008	July 1, 2007	July 1, 2006	July 1, 2005	July 1, 2004	July 1, 2003	July 1, 2002	July 1, 2001	July 1, 2000	Estimates Base	Census
000	New Jersey	3,526,453	3,516,171	3,500,009	3,473,786	3,444,384	3,415,695	3,390,104	3,366,742	3,344,561	3,317,394	3,310,287	3,310,275
001	Atlantic County	127,768	127,240	126,381	124,796	123,061	121,218	119,165	117,358	115,864	114,444	114,089	114,090
003	Bergen County	351,463	350,976	349,561	348,274	346,147	344,911	344,311	343,339	342,348	340,328	339,823	339,820
005	Burlington County	176,023	175,386	174,688	172,323	171,148	169,911	168,388	166,320	164,408	161,933	161,313	161,311
007	Camden County	206,985	206,515	205,793	204,994	203,638	202,580	201,015	200,201	199,774	199,317	199,204	199,679
009	Cape May County	102,614	102,324	101,905	100,576	98,386	96,433	94,917	93,655	92,403	91,318	91,047	91,047
011	Cumberland County	56,095	55,908	55,382	54,786	54,273	53,802	53,517	53,277	53,084	52,908	52,864	52,863
013	Essex County	312,821	312,287	311,276	308,878	306,577	305,013	303,554	302,728	301,935	301,199	301,015	301,011
015	Gloucester County	107,916	107,344	106,652	105,761	103,843	101,972	100,251	98,576	97,053	95,834	95,530	95,054
017	Hudson County	259,674	257,178	254,851	251,383	247,629	244,489	242,994	242,067	241,542	240,803	240,618	240,618
019	Hunterdon County	49,056	48,958	48,752	48,499	48,083	47,524	46,804	46,290	45,693	45,164	45,032	45,032
021	Mercer County	141,162	140,837	140,445	139,912	138,932	137,598	136,704	135,577	134,516	133,527	133,280	133,280
023	Middlesex County	288,978	288,495	287,470	285,513	282,886	280,779	278,984	277,480	276,078	274,127	273,639	273,637
025	Monmouth County	257,734	256,733	255,211	253,122	251,422	249,117	247,349	245,336	243,056	240,874	240,884	240,884
027	Morris County	185,544	185,189	184,553	183,414	182,263	181,189	179,992	178,438	177,207	174,894	174,379	174,379
029	Ocean County	275,755	274,692	273,043	271,420	268,965	265,563	261,967	258,812	255,281	250,025	248,711	248,711
031	Passaic County	172,396	172,372	172,050	171,635	171,402	171,048	170,629	170,346	170,118	170,061	170,047	170,048
033	Salem County	27,766	27,640	27,560	27,334	27,096	26,818	26,565	26,439	26,300	26,186	26,158	26,158
035	Somerset County	122,401	122,124	121,403	120,028	119,282	118,303	117,246	116,298	115,142	113,396	112,024	112,023
037	Sussex County	60,878	60,764	60,546	60,087	59,544	59,042	58,563	57,993	57,293	56,680	56,527	56,528
039	Union County	197,781	197,602	197,015	195,974	195,195	194,296	193,590	193,389	193,313	193,019	192,945	192,945
041	Warren County	45,643	45,607	45,472	45,077	44,612	44,089	43,599	42,823	42,153	41,357	41,158	41,157

Note: The April 1, 2000 Housing Unit Estimates Base reflects changes to the Census 2000 housing units from the Count Question Resolution program and geographic program revisions.

Source: Population Division, U.S. Census Bureau

Release Date: September 9, 2010

# Housing



Photo: J. Hasse

## GCT-PH1: Population Housing Units and Density: 2010

Data Set: Census 2010 Redistricting File  
Geographic Area: New Jersey -- State and County

Geographic area	Population	Housing units	Occupied	Vacant	Area in square miles			Density per square mile of land area		Vacancy Rate
					Total area	Water area	Land area	Population	Housing units	
New Jersey	8,791,894	3,553,562	3,214,360	339,202	8,722.58	1,368.36	7,354.22	1,195.49	483.20	9.55%
COUNTY										
Atlantic County	274,549	126,647	102,847	23,800	671.83	116.12	555.70	494.06	227.90	18.79%
Bergen County	905,116	352,388	335,730	16,658	246.67	13.66	233.01	3,884.47	1,512.34	4.73%
Burlington County	448,734	175,615	166,318	9,297	819.84	21.26	798.58	561.92	219.91	5.29%
Camden County	513,657	204,943	190,980	13,963	227.29	6.03	221.26	2,321.48	926.24	6.81%
Cape May County	97,265	98,309	40,812	57,497	620.42	368.99	251.42	386.86	391.01	58.49%
Cumberland County	156,898	55,834	51,931	3,903	677.62	193.92	483.70	324.37	115.43	6.99%
Essex County	783,969	312,954	283,712	29,242	129.63	3.42	126.21	6,211.51	2,479.58	9.34%
Gloucester County	288,288	109,796	104,271	5,525	337.18	15.17	322.01	895.29	340.98	5.03%
Hudson County	634,266	270,335	246,437	23,898	62.31	16.12	46.19	13,731.37	5,852.55	8.84%
Hunterdon County	128,349	49,487	47,169	2,318	437.44	9.62	427.82	300.01	115.67	4.68%
Mercer County	366,513	143,169	133,155	10,014	228.89	4.33	224.56	1,632.16	637.56	6.99%
Middlesex County	809,858	294,800	281,186	13,614	322.83	13.91	308.91	2,621.63	954.31	4.62%
Monmouth County	630,380	258,410	233,983	24,427	665.32	196.53	468.79	1,344.69	551.22	9.45%
Morris County	492,276	189,842	180,534	9,308	481.62	21.45	460.18	1,069.75	412.54	4.90%
Ocean County	576,567	278,052	221,111	56,941	915.40	286.62	628.78	916.96	442.21	20.48%
Passaic County	501,226	175,966	166,785	9,181	197.11	12.51	184.59	2,715.31	953.27	5.22%
Salem County	66,083	27,417	25,290	2,127	372.33	40.43	331.90	199.11	82.61	7.76%
Somerset County	323,444	123,127	117,759	5,368	304.86	3.04	301.81	1,071.67	407.96	4.36%
Sussex County	149,265	62,057	54,752	7,305	535.74	16.73	519.01	287.59	119.57	11.77%
Union County	536,499	199,489	188,118	11,371	105.40	2.55	102.85	5,216.07	1,939.52	5.70%
Warren County	108,692	44,925	41,480	3,445	362.86	5.94	356.92	304.53	125.87	7.67%

Note: Vacancy Rate for Monmouth, Ocean, Atlantic, Cape May and Sussex Counties will be higher due to seasonal housing.

Source: U.S. Census Bureau, 2010 Census Redistricting Data (Public Law 94-171) Summary File, Table H1.  
Prepared by: New Jersey Department of Labor and Workforce Development; New Jersey State Data Center; February, 2011

## 2010 County Highlights

### Most Housing Units Added (2000 – 2010)

- Hudson County + 29,714
- Ocean County + 29,341

### Fastest Housing Unit Growth Rate

- Gloucester County + 15.5%

### Non-Family Household Growth Rate

- Gloucester County + 20.9%
- Hunterdon County + 18.2%
- Sussex County + 17.3%

### Average Household Size

- New Jersey 2.68
- Passaic County 2.94
- Hunterdon County 2.62
- Ocean County 2.58
- Cape May County 2.32

### Housing Vacancy Rate

- New Jersey 9.5%
- Cape May County 58.5%
- Somerset County 4.4%

### Home Ownership Rate

- New Jersey 65.4%
- Sussex County 84.3%
- Hunterdon County 83.9%
- Essex County 45.2%
- Hudson County 32.1%

# Building Permits

## Dollar amount of construction authorized by building permit type, 2009

Source: New Jersey Department of Community Affairs, 6/7/10

Year	Total	New construction	Additions	Alterations
1996	\$7,028,424,990	\$3,725,240,082	\$727,183,361	\$2,576,001,547
1997	8,346,533,114	4,549,229,096	951,959,980	2,845,344,038
1998	9,396,755,517	5,308,193,413	1,011,107,698	3,077,454,406
1999	10,584,167,530	6,077,922,414	1,137,672,723	3,368,572,393
2000	11,387,683,514	6,347,401,478	1,214,855,819	3,825,426,217
2001	12,007,456,630	6,821,250,336	1,579,284,794	3,606,921,500
2002	12,079,942,099	6,303,134,347	1,711,197,266	4,065,610,486
2003	12,148,747,807	6,300,043,004	1,979,797,826	3,868,906,977
2004	14,274,331,850	7,483,785,506	2,245,519,758	4,545,026,586
2005	15,397,507,147	8,177,824,881	2,150,853,504	5,068,828,762
2006	15,675,107,955	7,312,085,977	2,454,929,331	5,908,092,647
2007	15,356,572,820	7,421,039,940	2,147,990,559	5,787,542,321
2008	13,944,534,578	6,677,373,874	1,792,342,614	5,474,818,090
2009	9,517,725,396	3,563,193,177	1,332,897,670	4,621,634,549

## Housing units authorized by building permits, 2009

Source: New Jersey Department of Community Affairs, 6/7/10

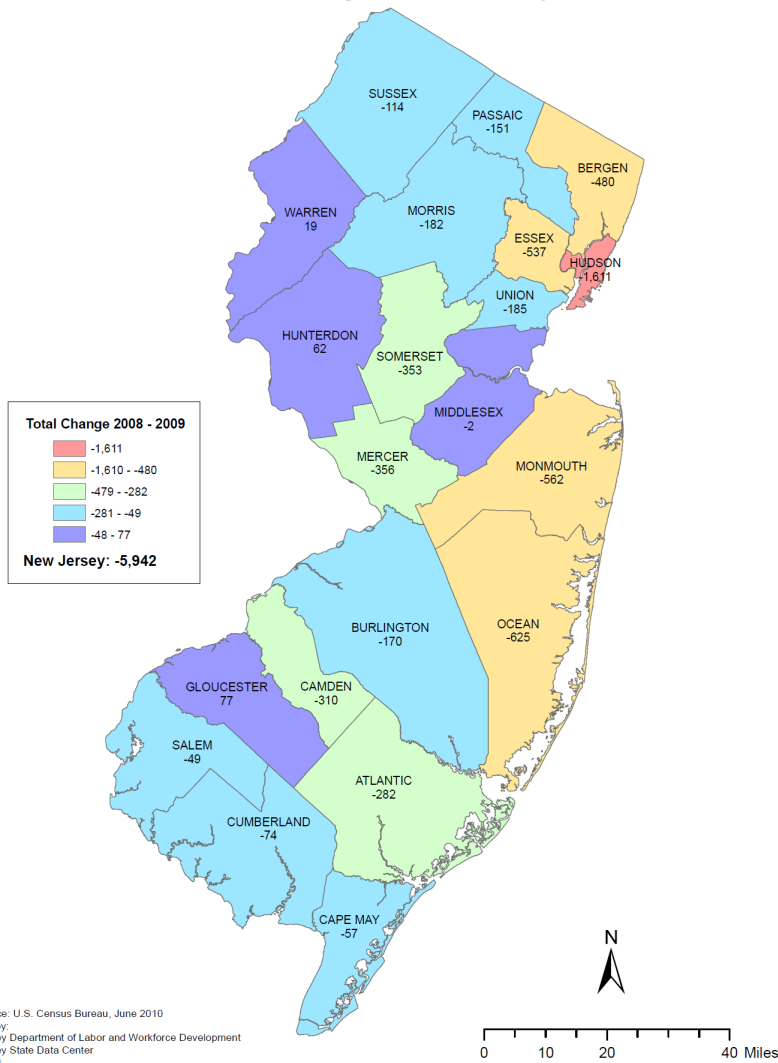
county	municipality	Total	1&2 family	Multifamily	Mixed use	rank
Atlantic		500	431	66	3	8
Bergen		544	327	215	2	7
Burlington		661	356	301	4	6
Camden		485	204	281	0	9
Cape May		412	296	115	1	12
Cumberland		242	207	32	3	16
Essex		448	169	279	0	11
Gloucester		740	603	137	0	5
Hudson		1,550	143	1,382	25	1
Hunterdon		226	60	165	1	17
Mercer		336	245	90	1	14
Middlesex		948	654	291	3	3
Monmouth		896	663	229	4	4
Morris		465	216	248	1	10
Ocean		1,387	1,319	65	3	2
Passaic		193	88	105	0	18
Salem		180	44	135	1	19
Somerset		312	310	1	1	15
Sussex		106	99	4	3	21
Union		378	208	168	2	13
Warren		136	134	0	2	20
State buildings		0	0	0	0	
New Jersey		11,145	6,776	4,309	60	

## Housing units authorized by building permits for new construction, 2000

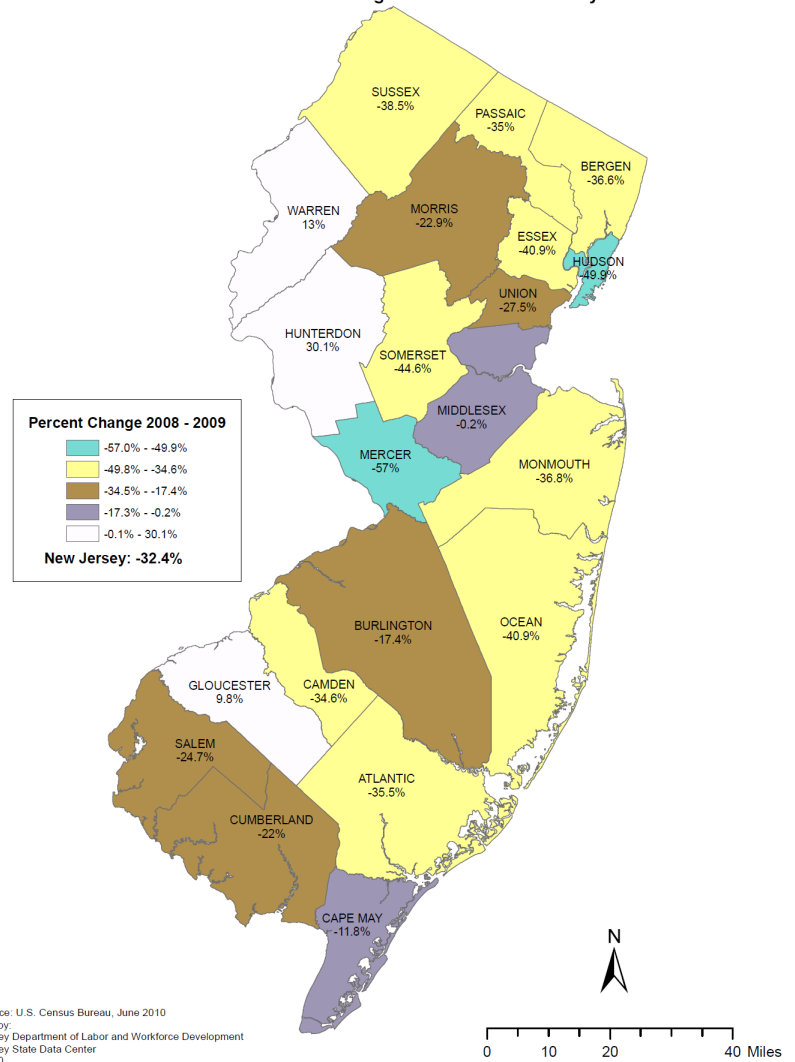
Source: New Jersey Department of Community Affairs

county	AREA NAME	Authorized housing units (new construction only)
Atlantic		1,658
Bergen		2,753
Burlington		3,105
Camden		884
Cape May		1,396
Cumberland		228
Essex		1,576
Gloucester		1,501
Hudson		1,773
Hunterdon		620
Mercer		1,413
Middlesex		2,621
Monmouth		3,534
Morris		3,163
Ocean		5,605
Passaic		606
Salem		143
Somerset		2,074
Sussex		720
Union		844
Warren		908
State buildings		0
New Jersey		37,125

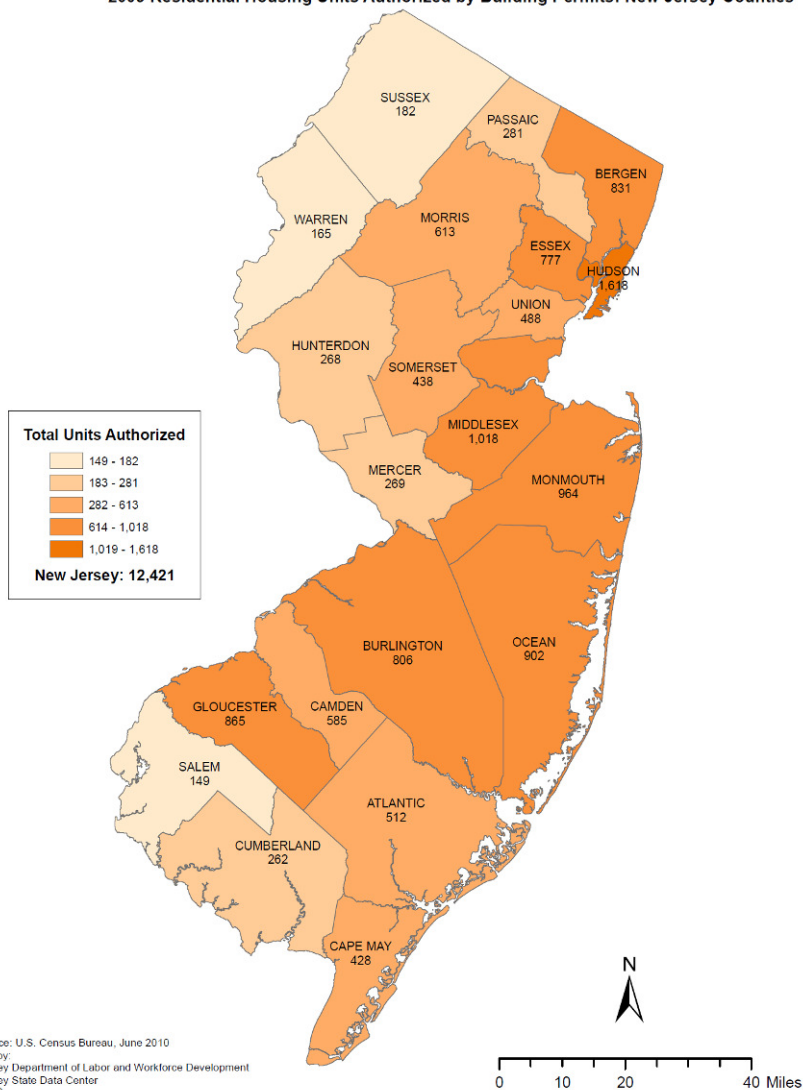
**Residential Housing Units Authorized by Building Permits:  
Annual Change 2008 - 2009 New Jersey Counties**



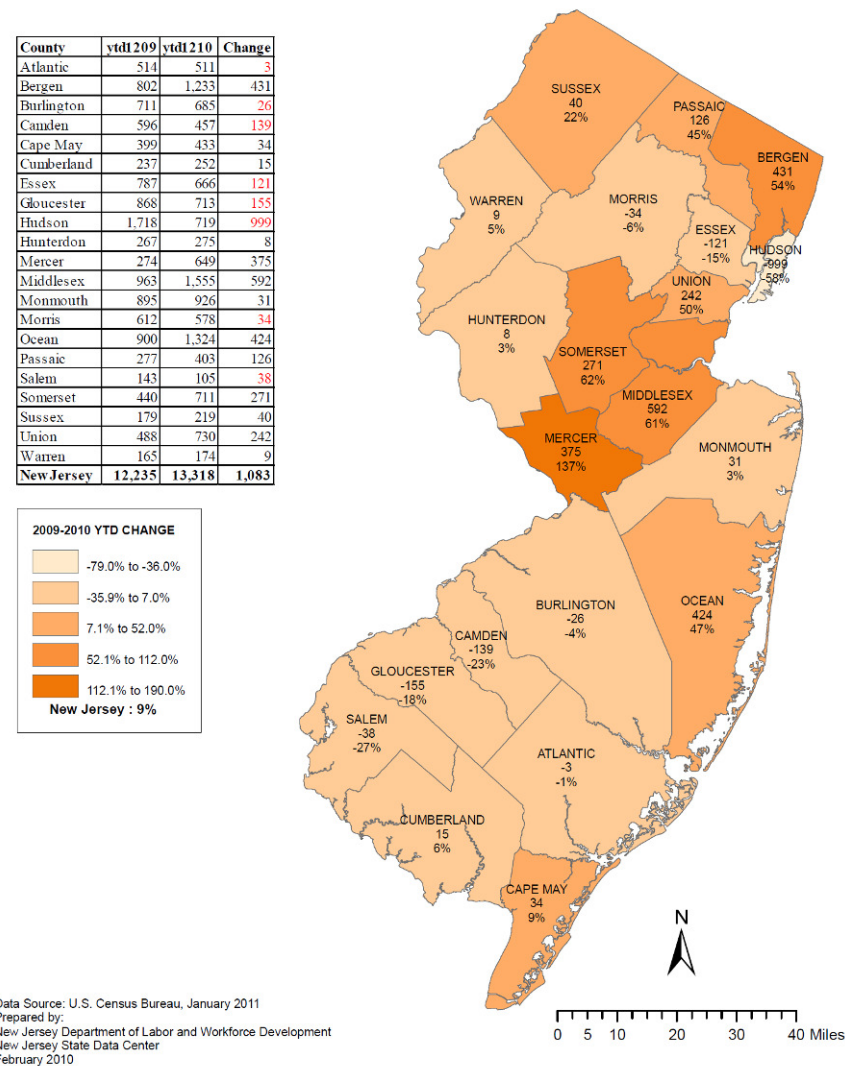
**Residential Housing Units Authorized by Building Permits:  
Annual Percent Change 2008 - 2009 New Jersey Counties**



2009 Residential Housing Units Authorized by Building Permits: New Jersey Counties

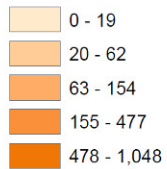


Residential Housing Units Authorized: New Jersey Counties  
December 2009 - December 2010 Year - to - Date Changes

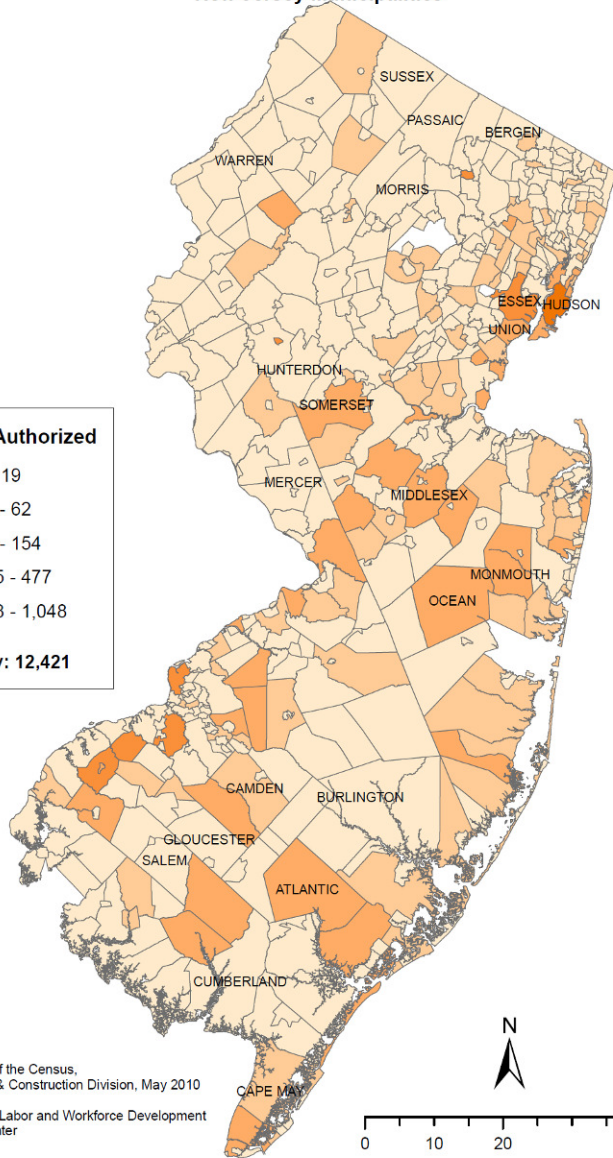


# 2009 Residential Housing Units Authorized by Building Permits New Jersey Municipalities

## Total Units Authorized



New Jersey: 12,421

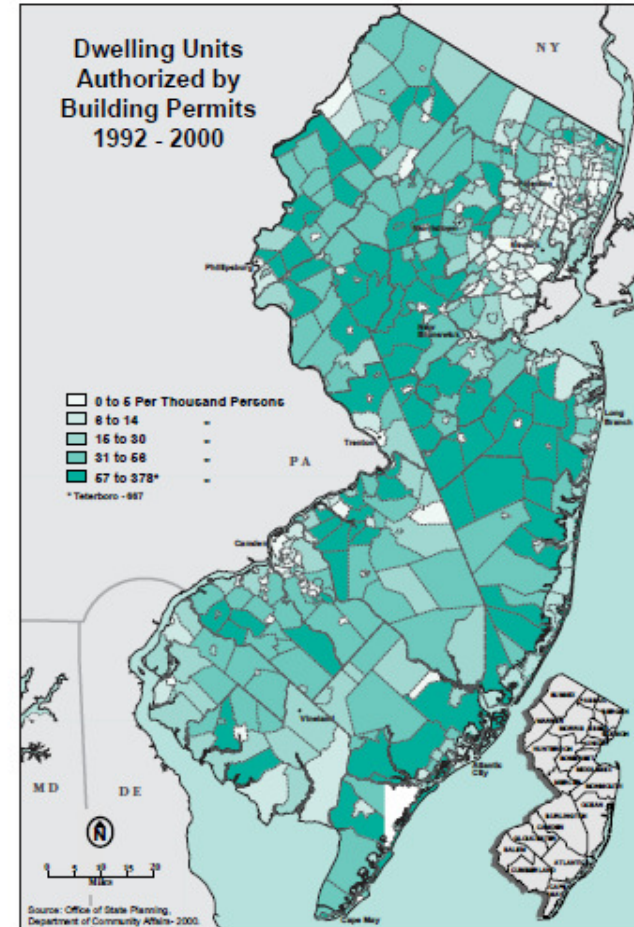


Data Source: U.S. Bureau of the Census,  
Manufacturing & Construction Division, May 2010  
Prepared by:  
New Jersey Department of Labor and Workforce Development  
New Jersey State Data Center  
June 2010

## Dwelling Units Authorized by Building Permits 1992 - 2000



\* Teletubbies - 987



Source: Office of State Planning,  
Department of Community Affairs-2000.

December 2010 Year to Date New Privately Owned Residential Housing Units  
Authorized to Be Built: New Jersey Counties

County	Total Value	Total Units	Single- Family Units	Two- Family Units	3-or-4- Family Units	5-or-More Family Units
Atlantic County	79,391,226	511	418	16	3	74
Bergen County	297,033,506	1,233	612	124	22	475
Burlington County	94,528,006	685	439	2	3	241
Camden County	46,682,495	457	246	72	4	135
Cape May County	110,091,396	433	283	110	3	37
Cumberland County	28,238,682	252	230	2	3	17
Essex County	106,454,582	666	274	44	22	326
Gloucester County	83,713,243	713	495	6	0	212
Hudson County	101,149,327	719	67	64	60	528
Hunterdon County	35,481,924	275	194	0	0	81
Mercer County	94,474,479	649	176	8	17	448
Middlesex County	163,588,819	1,555	825	10	18	702
Monmouth County	165,269,346	926	583	8	7	328
Morris County	120,439,374	578	408	6	16	148
Ocean County	197,249,721	1,324	860	10	59	395
Passaic County	49,394,420	403	157	30	0	216
Salem County	10,587,947	105	83	2	0	20
Somerset County	99,987,392	711	437	76	35	163
Sussex County	41,850,693	219	212	2	0	5
Union County	67,489,337	730	228	56	7	439
Warren County	23,627,054	174	166	0	0	8
New Jersey	2,016,722,969	13,318	7,393	648	279	4,998

Source: U.S. Bureau of the Census, Manufacturing and Construction Division.  
Prepared by: New Jersey Department of Labor and Workforce Development, January 2011.

### Square feet of retail space authorized by building permits, 2000

Source: New Jersey Department of Community Affairs

county	AREA NAME	Square feet of retail space
Atlantic		453,039
Bergen		173,527
Burlington		480,731
Camden		95,527
Cape May		50,235
Cumberland		45,837
Essex		219,890
Gloucester		273,910
Hudson		239,736
Hunterdon		86,368
Mercer		587,514
Middlesex		561,413
Monmouth		467,781
Morris		371,432
Ocean		297,067
Passaic		278,383
Salem		6,786
Somerset		477,483
Sussex		20,447
Union		597,893
Warren		278,413
State buildings		0
New Jersey		6,063,412

### Square feet of retail space authorized by building permits, 2009

Source: New Jersey Department of Community Affairs, 6/7/10

county	AREA NAME	Total	New Construction	Additions	rank
Atlantic		8,241	6,891	1,350	15
Bergen		228,352	228,352	0	3
Burlington		96,526	96,525	1	9
Camden		551,813	548,813	3,000	1
Cape May		201,681	193,606	8,075	4
Cumberland		23,916	23,908	8	13
Essex		29,692	18,264	11,428	12
Gloucester		154,536	153,036	1,500	7
Hudson		175,938	141,800	34,138	5
Hunterdon		0	0	0	19
Mercer		2,421	3	2,418	17
Middlesex		287,578	276,039	11,539	2
Monmouth		61,926	23,487	38,439	10
Morris		5,321	1,995	3,326	16
Ocean		169,908	157,458	12,450	6
Passaic		8,386	4,966	3,420	14
Salem		0	0	0	20
Somerset		0	0	0	21
Sussex		136,054	112,007	24,047	8
Union		58,049	9,812	48,237	11
Warren		61	0	61	18
State buildings		48,536	48,536	0	
New Jersey		2,248,935	2,045,498	203,437	

### Square feet of office space authorized by building permits, 2000

Source: New Jersey Department of Community Affairs

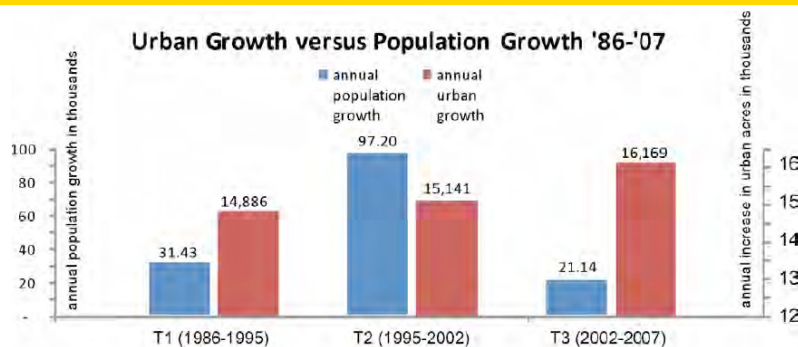
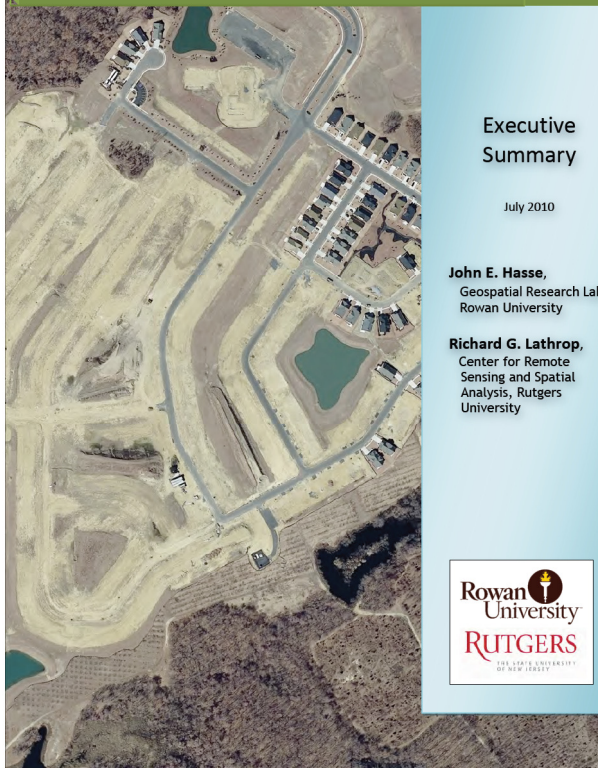
county	AREA NAME	Square feet of office space
Atlantic		185,814
Bergen		1,162,790
Burlington		709,714
Camden		279,490
Cape May		66,272
Cumberland		92,628
Essex		698,866
Gloucester		239,379
Hudson		788,205
Hunterdon		322,707
Mercer		2,099,357
Middlesex		1,453,241
Monmouth		919,706
Morris		2,866,993
Ocean		490,241
Passaic		215,907
Salem		73,756
Somerset		1,431,689
Sussex		66,838
Union		1,006,693
Warren		37,174
State buildings		323,579
New Jersey		15,531,039

### Square feet of office space authorized by building permits, 2009

Source: New Jersey Department of Community Affairs, 6/7/10

county	AREA NAME	Total	New Construction	Additions	rank
Atlantic		376,070	352,897	23,173	3
Bergen		237,494	190,035	47,459	6
Burlington		97,780	92,376	5,404	14
Camden		154,543	124,266	30,277	11
Cape May		66,439	61,940	4,499	17
Cumberland		90,702	40,835	49,867	15
Essex		204,722	111,789	92,933	7
Gloucester		67,673	63,480	4,193	16
Hudson		175,674	174,372	1,302	10
Hunterdon		58,286	57,500	786	18
Mercer		121,956	119,935	2,021	12
Middlesex		255,764	203,459	52,305	5
Monmouth		293,900	215,487	78,413	4
Morris		458,397	357,129	101,268	2
Ocean		189,679	180,115	9,564	9
Passaic		202,302	182,392	19,910	8
Salem		29,482	27,974	1,508	20
Somerset		678,023	656,423	21,600	1
Sussex		56,949	45,495	11,454	19
Union		119,666	69,499	50,167	13
Warren		9,683	5	9,678	21
State buildings		308,704	308,704	0	
New Jersey		4,253,888	3,636,107	617,781	

## Changing Landscapes in the Garden State:

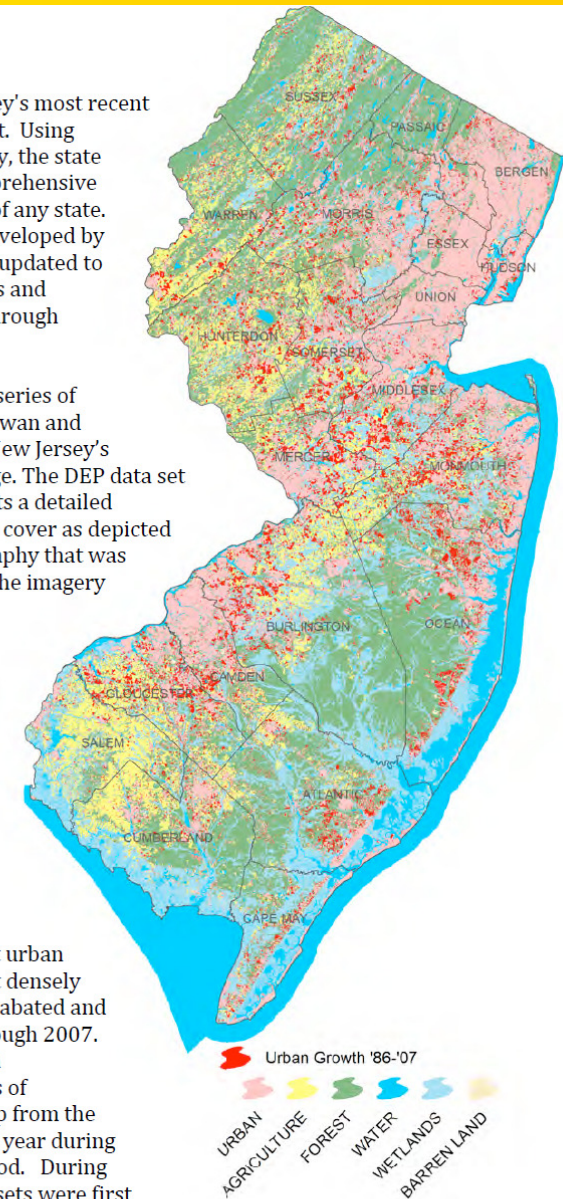


## 1 Introduction

The numbers are in for New Jersey's most recent statewide digital mapping dataset. Using high-precision aerial photography, the state has created one of the most comprehensive inventories of land composition of any state. The land use mapping initially developed by the NJ DEP in 1986 has just been updated to give a picture of land use patterns and changes in the Garden State up through 2007.

This report is part of an ongoing series of collaborative studies between Rowan and Rutgers Universities examining New Jersey's urban growth and land use change. The DEP data set utilized for the analysis represents a detailed mapping of the land use and land cover as depicted in high resolution aerial photography that was acquired in the spring of 2007. The imagery was then classified and mapped (Figure 1.1) providing a window into how the Garden State has developed over the past several decades (from 1986 through 2007) and the subsequent consequences to its land base. It views land development patterns from several different angles providing a "report card" on urban growth and open space loss.

What the data show is that is that urban development in the nation's most densely populated state has continued unabated and in fact gained momentum up through 2007. The data reveals a 7% increase in development rate to 16,061 acres of urbanization per year by 2007, up from the previous rate of 15,123 acres per year during the 1995 through 2002 time period. During the 21 year period since the datasets were first compiled, New Jersey urbanized a massive

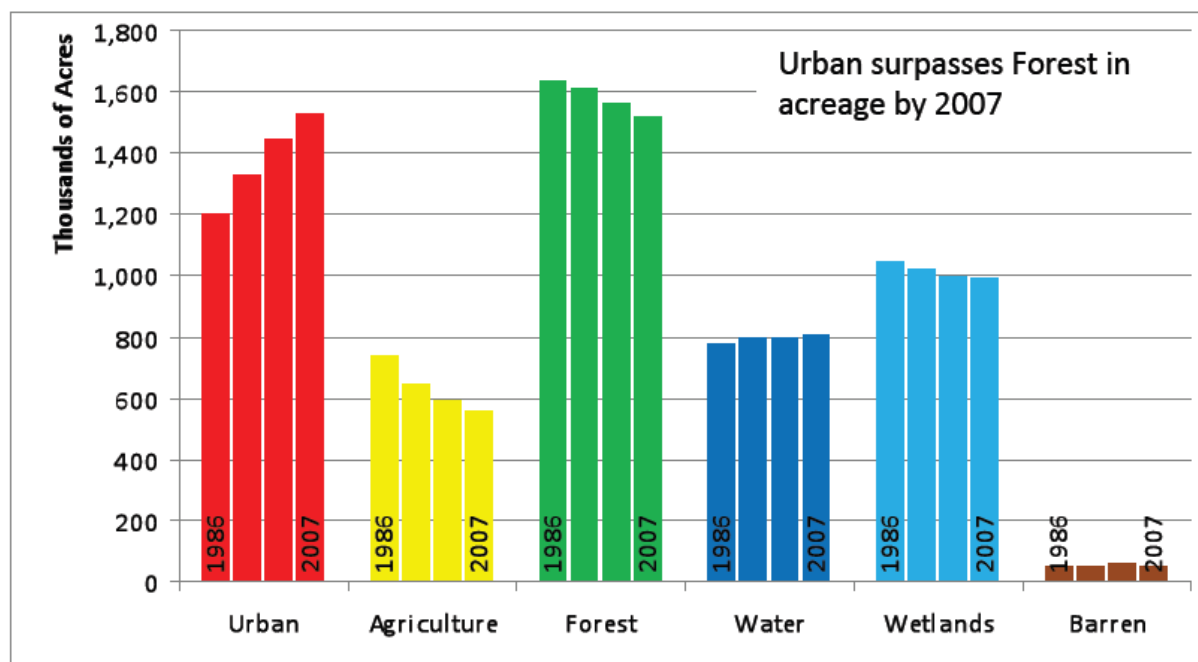


**Figure 1.1** Land use and urbanization in New Jersey 1986 through 2007

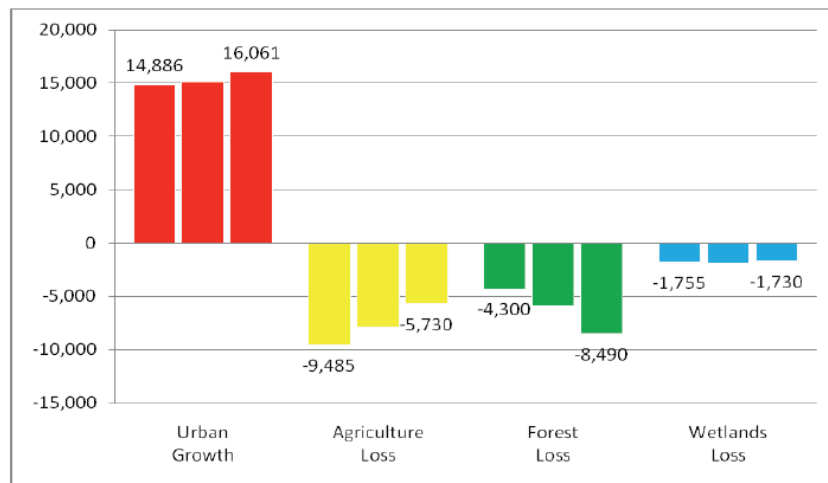
**Table 2.1** Level 1 land use/land cover for 1986, 1995, 2002 and 2007 time periods.

Two Decades of New Jersey's Land Use Change

	1986 (acres)	1995 (acres)	2002 (acres)	2007 (acres)	21 year Change	21 yr % Change
Urban	1,208,553	1,334,542	1,452,503	1,532,809	324,256	26.8%
Agriculture	744,382	652,335	594,696	566,044	178,338	-24.0%
Forest	1,641,279	1,616,522	1,568,809	1,526,358	114,921	-7.0%
Water	783,260	800,610	803,185	810,095	26,835	3.4%
Wetlands	1,049,269	1,022,253	1,005,636	996,984	-52,285	-5.0%
Barren	57,223	56,698	59,138	51,678	-5,545	-9.7%



**Figure 2.1.** Change in each Level 1 category over the 1986, 1995, 2002 and 2007 time periods.



**Figure 2.2** Annualized rates of land use change for the T1('86 - '95), T2('95 - '02) and T3('02 - '07) time periods.



**Figure 4.1** Low density large lot residential units consumed about 67% of the open land developed into housing in New Jersey but housed only about 24% of the residents that occupied newly developed units. This pattern has remained consistent throughout the 21 period of the study.

**Table 7.1** Acre/yr change in Level 1 land use during T3 by county. Highlighted in red are the top 5 and in yellow are the next 5 ranked counties in each category of land use change.

<b>T3 Acres per Year Change</b>				
County	Urban	Ag	forest	wetland
Atlantic	1,104	-117	-856	-114
Bergen	284	-17	-319	-43
Burlington	1,412	-598	-600	-230
Camden	575	-139	-417	-50
Cape May	351	-130	-218	-27
Cumberland	524	-246	-376	-13
Essex	167	-3	-134	-22
Gloucester	1,531	-1,225	-422	-138
Hudson	90	0	-94	-19
Hunterdon	960	-470	-368	-43
Mercer	693	-444	-96	-71
Middlesex	1,128	-483	-398	-221
Monmouth	1,754	-583	-642	-244
Morris	930	-124	-685	-70
Ocean	1,565	-99	-1,414	-110
Passaic	191	0	-158	-17
Salem	327	-212	-60	-105
Somerset	909	-344	-311	-114
Sussex	875	-262	-582	-78
Union	59	-3	-47	-6
Warren	631	-233	-291	-28

**Table 8.1** Estimated available lands by NJ Smart Growth Planning Areas

Planning Area	Acres Avail Land in Smart Growth Zone		Acres Avail Land not in Smart Growth Zone	
Pinelands	48,002	5%	198,759	20%
Highlands	14,015	1%	147,302	15%
State Plan	174,243	18%	409,328	41%

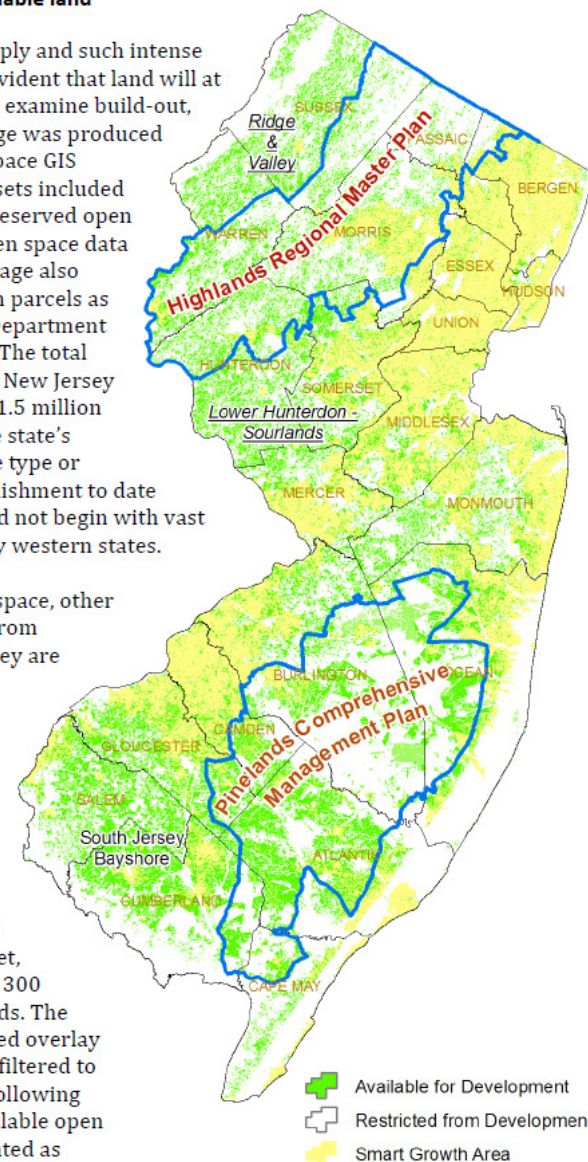
Development Growth  
Significantly Exceeding  
Population Growth  
= Urban Sprawl

New Jersey has just  
Completed Its Two  
Most Sprawling Decades  
In History

## 8 The final million acres of available land

In a state with limited land supply and such intense growth pressures it becomes evident that land will at some point run out. In order to examine build-out, a statewide open space coverage was produced by combining available open space GIS datasets. The open space datasets included the NJDEP, federal and state preserved open space layers and additional open space data developed at CRSSA. The coverage also includes farmland preservation parcels as of 2009 acquired from the NJ Department of Agriculture (NJSADC 2010). The total land estimated as preserved in New Jersey as of 2009 was approximately 1.5 million acres. This is almost 1/3 of the state's territory in preservation of one type or another, a remarkable accomplishment to date considering that New Jersey did not begin with vast tracks of public land as in many western states.

In addition to preserved open space, other land categories are restricted from development either because they are already developed or have constraints to development such as wetlands. The restricted lands coverage was created by overlaying all non-developable lands which were defined as preserved open space (as mentioned above), steep slopes above fifteen percent, streams, water and wetlands buffered to 50 feet, category 1 streams buffered to 300 feet and already developed lands. The layers were combined in gridded overlay at a 50 foot cell sized and then filtered to remove all single pixel gaps. Following this methodology the total available open land still remaining was estimated as 991,649 acres. While this model provides a reasonable estimate of remaining available lands, it has limitations and

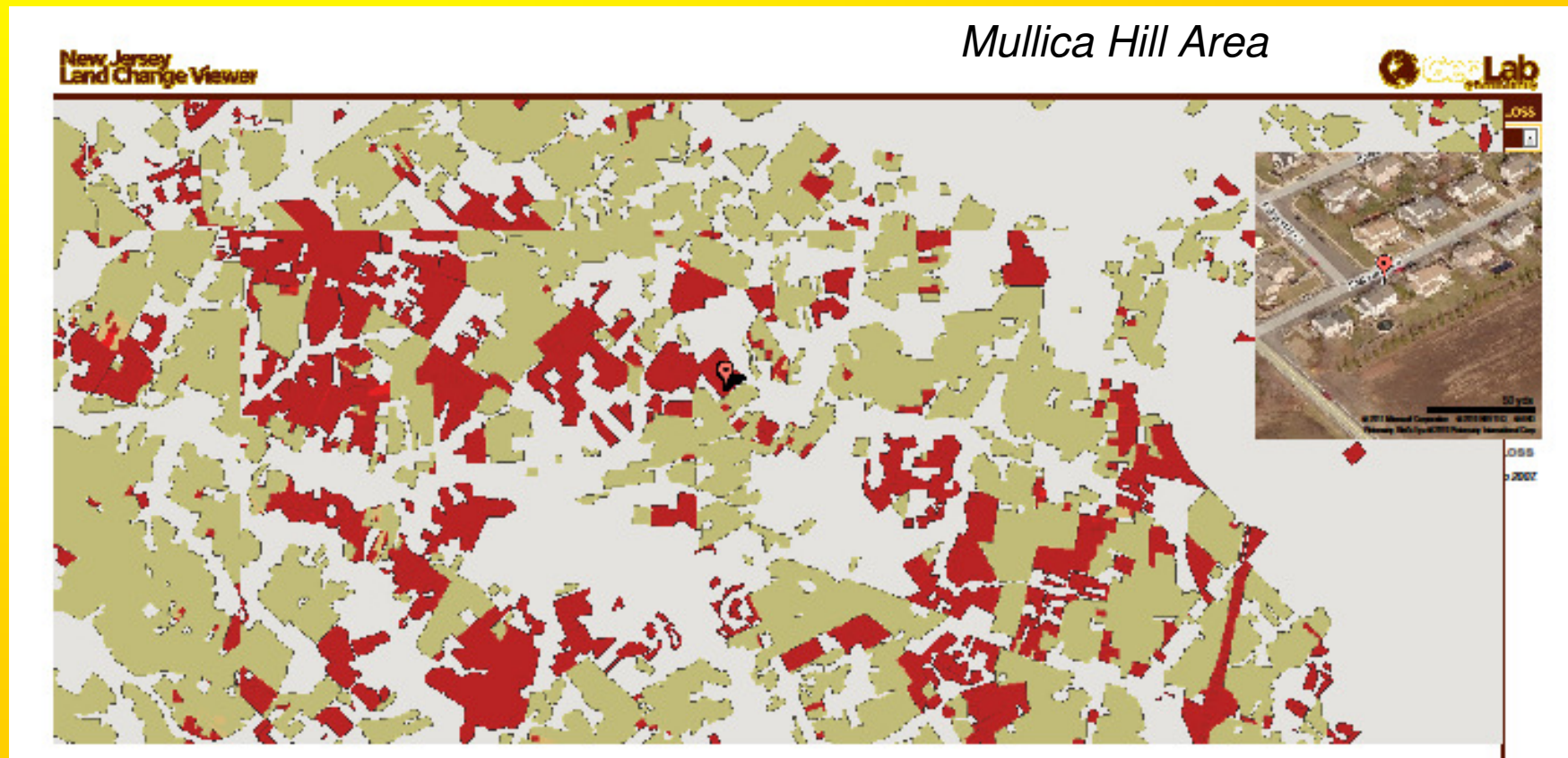


**Figure 8.1 .** Remaining available land. The remaining available lands (light green) will become either preserved or developed as New Jersey approaches build-out in the coming decades.

Gloucester County (1986 – 2007)

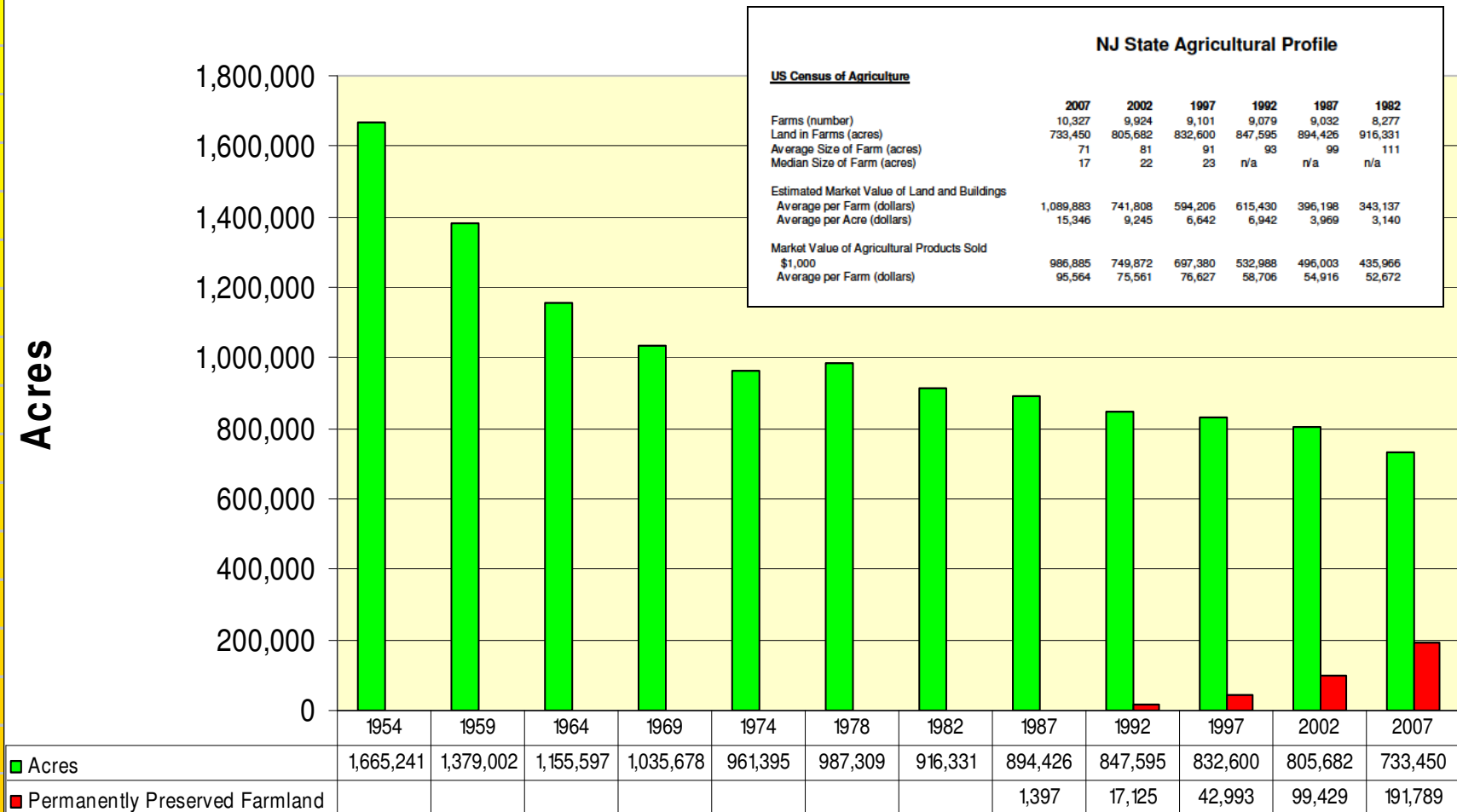
Highest Rate of Agricultural Land Lost to Urbanization

**1,225 Farmland Acres Lost Per Year**



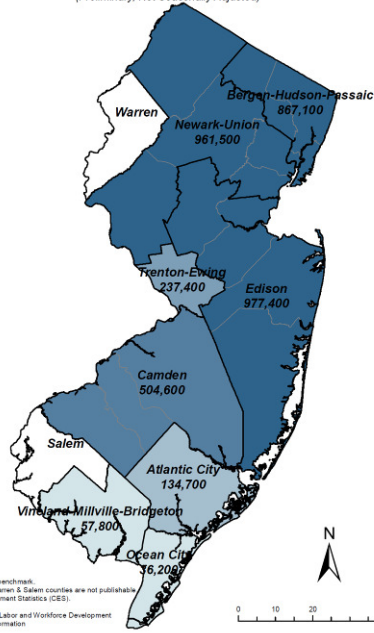
# New Jersey Land in Farms 1954 - 2007

## Permanently Preserved Farmland as of 5/31/11



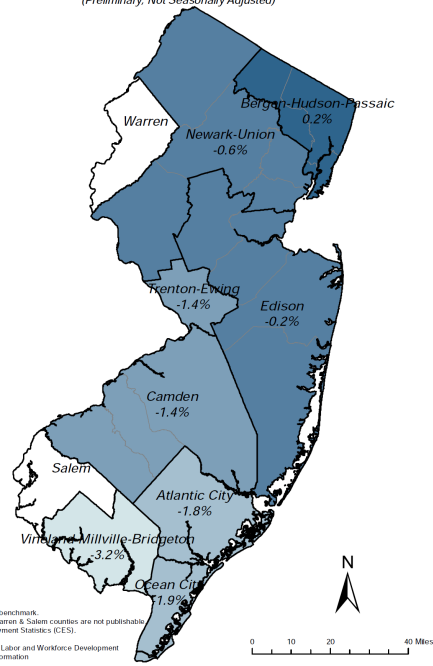
### Nonfarm Jobs - New Jersey Labor Areas April 2011

(Preliminary, Not Seasonally Adjusted)



### Year Over Change in Nonfarm Jobs New Jersey Labor Areas - April 2011

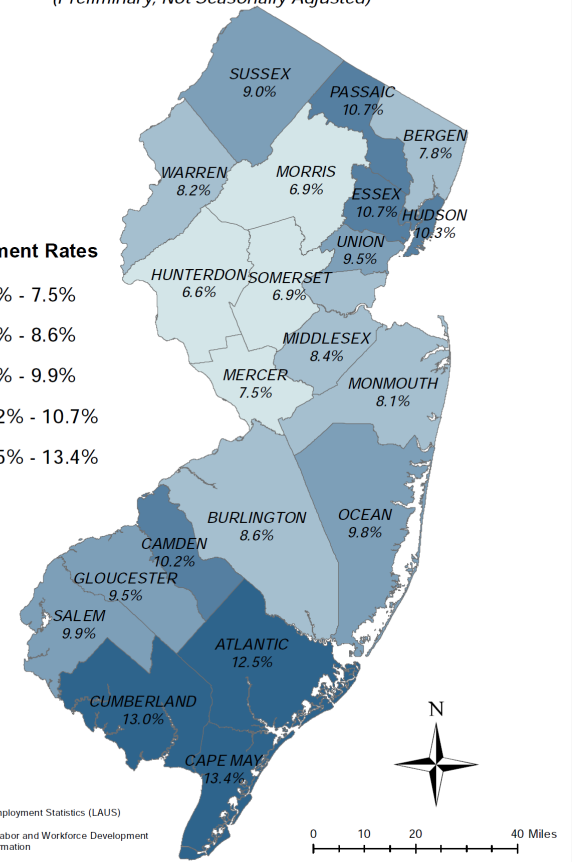
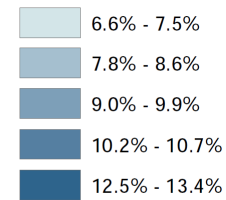
(Preliminary, Not Seasonally Adjusted)



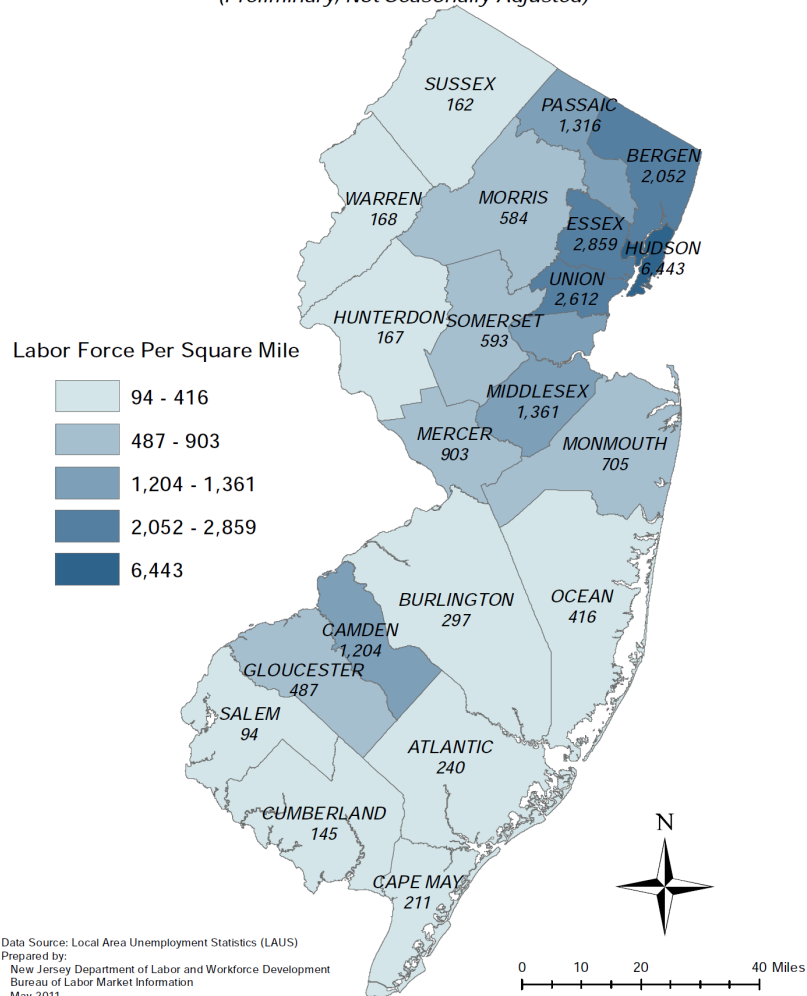
### New Jersey Counties April 2011 - Unemployment Rates

(Preliminary, Not Seasonally Adjusted)

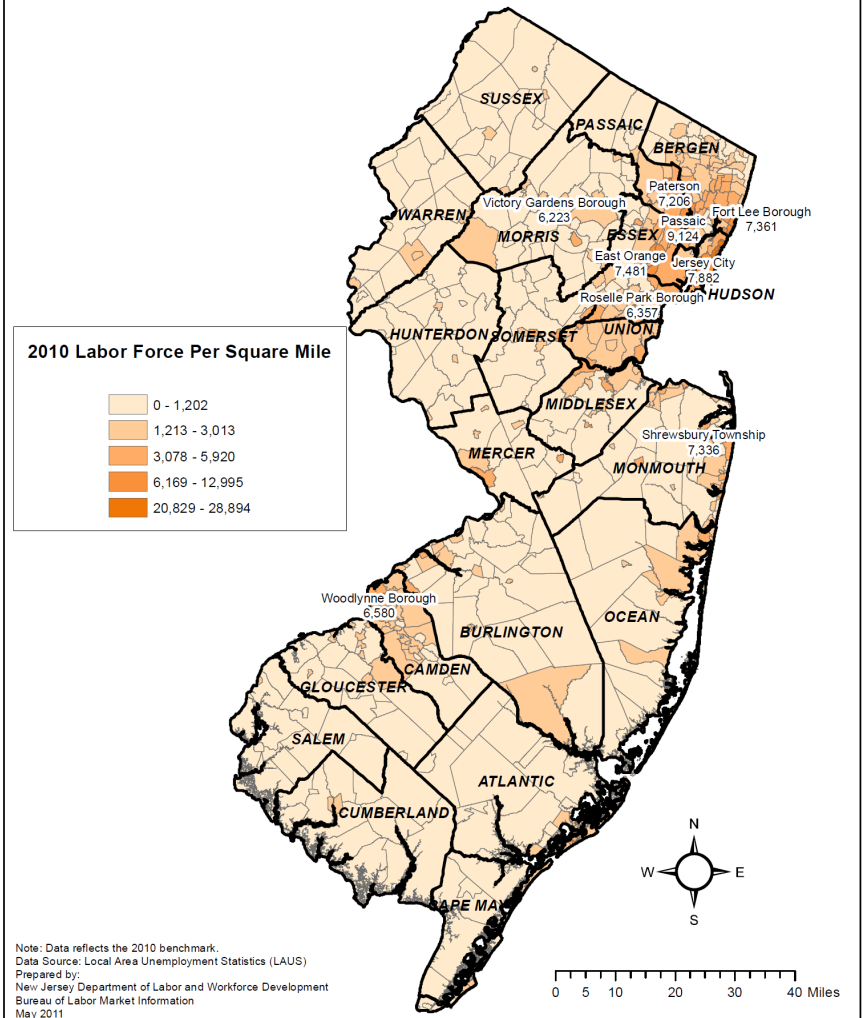
#### Unemployment Rates



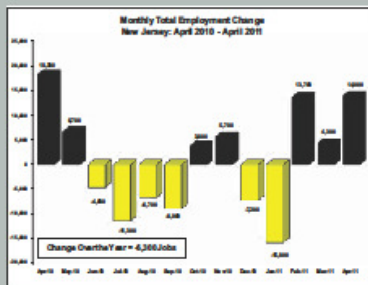
**New Jersey Counties**  
**Labor Force Per Square Mile - April 2011**  
*(Preliminary, Not Seasonally Adjusted)*



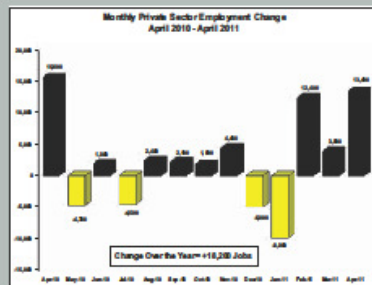
**2010 Labor Force Square Mile - Annual Averages**  
**New Jersey Municipalities**



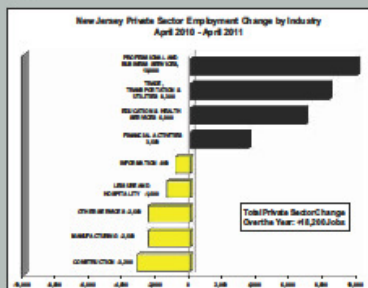
## New Jersey Economy at a Glance: April 2011



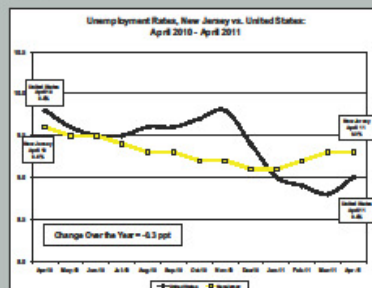
14,000 Total Nonfarm  
Job Gain in April



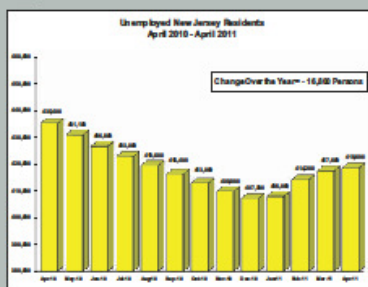
13,400 Private Sector  
Job Gain in April



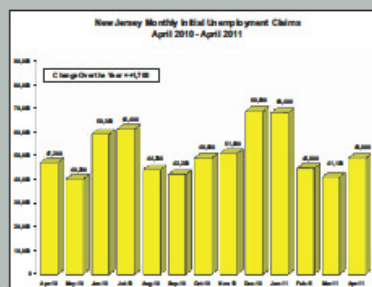
18,200 Private Sector  
Job Gain Over the Year



Unemployment Rate  
Unchanged at 9.3%



Unemployed Residents  
Up Slightly in April



Initial UI Claims Up  
by 7,800 in April



For questions or further information please contact:  
Division of Labor Market & Demographic Research 609-984-6925



## New Jersey Department of Labor and Workforce Development Labor Market and Demographic Research Bureau of Labor Statistics

### New Jersey Annual Averages Local Area Unemployment Statistics Model Estimates 2010 Benchmark

\* Numbers May Not Add Due to Rounding

March 10, 2011

	Civilian Noninstitutional Population	Civilian Labor Force	Resident Employment Level	Unemployment Rate (%)	Labor Force Participation Rate (%)	Employment Population Ratio	
Year							
2010	6,812,200	4,502,400	4,076,700	425,700	9.5	66.1	59.8
2009	6,766,200	4,526,500	4,116,400	410,100	9.1	66.9	60.8
2008	6,722,100	4,501,500	4,256,300	245,400	5.5	67.0	63.3
2007	6,686,100	4,456,300	4,265,300	191,100	4.3	66.7	63.8
2006	6,628,200	4,465,100	4,257,900	207,200	4.6	67.1	64.0
2005	6,530,700	4,404,500	4,207,700	196,700	4.5	66.4	63.4
2004	6,502,500	4,350,900	4,144,200	214,700	4.9	66.0	62.7
2003	6,573,500	4,363,900	4,108,400	255,500	5.9	66.4	62.5
2002	6,535,900	4,370,800	4,117,300	253,500	5.8	66.9	63.0
2001	6,488,900	4,302,300	4,117,500	184,800	4.3	66.3	63.4
2000	6,440,400	4,287,800	4,130,300	157,500	3.7	66.6	64.1
1999	6,399,000	4,284,500	4,092,700	191,800	4.5	67.0	64.0
1998	6,352,400	4,242,400	4,047,100	195,300	4.6	66.8	63.7
1997	6,301,900	4,257,400	4,031,000	226,400	5.3	67.6	64.0
1996	6,247,200	4,184,100	3,925,800	258,300	6.2	67.0	62.8
1995	6,196,900	4,111,800	3,846,300	265,500	6.5	66.4	62.1
1994	6,158,200	4,057,500	3,790,000	277,500	6.8	66.0	61.5
1993	6,128,500	4,034,500	3,727,300	307,300	7.6	66.8	60.8
1992	6,097,400	4,051,300	3,709,500	342,400	8.5	66.5	60.8
1991	6,076,000	4,050,400	3,776,500	273,700	6.8	66.7	62.2
1990	6,045,500	4,072,500	3,865,000	207,500	5.1	67.4	63.9
1989	6,032,500	3,989,000	3,826,000	163,000	4.1	66.1	63.4
1988	6,031,300	3,975,000	3,824,000	151,000	3.8	66.9	63.4
1987	6,002,000	3,966,000	3,806,000	160,000	4.0	66.1	63.4
1986	5,947,800	3,908,000	3,712,000	196,000	5.0	66.7	62.4
1985	5,969,300	3,839,000	3,621,000	217,000	5.7	66.4	61.7
1984	5,834,300	3,825,000	3,589,000	236,000	6.2	66.6	61.5
1983	5,779,000	3,673,000	3,385,000	288,000	7.8	63.6	58.6
1982	5,714,300	3,632,000	3,306,000	326,000	9.0	63.6	57.9
1981	5,662,300	3,593,000	3,330,000	263,000	7.3	63.5	58.8
1980	5,599,200	3,594,000	3,334,000	260,000	7.2	64.2	59.5
1979	5,553,900	3,570,000	3,323,000	247,000	6.9	64.3	59.8
1978	5,497,900	3,497,000	3,209,000	288,000	7.2	62.9	58.4
1977	5,437,000	3,383,000	3,065,000	317,000	9.4	62.2	56.4
1976	5,383,000	3,318,000	2,973,000	345,000	10.4	61.6	55.2
1975	5,329,000	3,264,000	2,929,000	334,000	10.2	61.2	55.0
1974	5,270,000	3,226,000	3,023,000	204,000	6.3	61.2	57.4
1973	5,212,000	3,190,000	3,011,000	180,000	5.6	61.2	57.8
1972	5,149,000	3,117,000	2,935,000	182,000	5.8	60.5	57.0
1971	5,061,000	3,012,000	2,840,000	172,000	5.7	59.5	56.1
1970	4,964,000	2,996,000	2,859,000	136,000	4.6	60.4	57.6

NOTE: Estimates prior to 1978 are not comparable to 1978 and forward.  
Population and labor force data revised back to 2008.

For further information, contact Rosanne Elcenko at (800) 777-2193

**New Jersey Department of Labor and Workforce Development  
Labor Market and Demographic Research  
Bureau of Labor Statistics**

**New Jersey Annual Averages  
Local Area Unemployment Statistics Model Estimates  
2010 Benchmark**

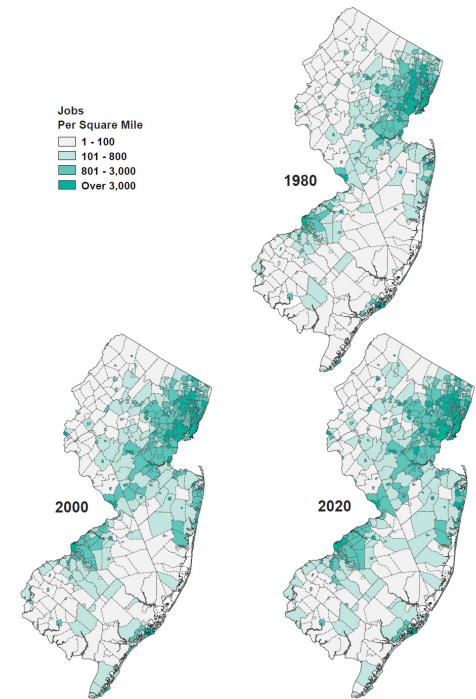
\* Numbers May Not Add Due to Rounding

March 10, 2011

Year	Civilian Noninstitutional Population	Civilian Labor Force	Resident Employment Level	Unemployment Rate (%)	Labor Force Participation Rate (%)	Employment Population Ratio
2010	6,812,200	4,502,400	4,076,700	425,700	9.5	66.1
2009	6,766,200	4,526,500	4,116,400	410,100	9.1	66.9
2008	6,722,100	4,501,600	4,256,300	245,300	5.5	67.0
2007	6,686,100	4,456,300	4,265,300	191,000	4.3	66.7
2006	6,688,200	4,468,100	4,257,900	207,200	4.6	67.1
2005	6,630,700	4,404,500	4,207,700	196,700	4.5	66.4
2004	6,602,600	4,398,900	4,144,200	214,700	4.9	66.0
2003	6,573,500	4,363,900	4,108,400	255,500	5.9	66.4
2002	6,535,900	4,370,800	4,117,300	253,500	5.8	66.9
2001	6,488,900	4,302,300	4,117,500	184,800	4.3	66.3
2000	6,440,400	4,287,800	4,130,300	157,500	3.7	66.6
1999	6,399,000	4,284,600	4,092,700	191,900	4.5	67.0
1998	6,352,400	4,242,400	4,047,100	195,300	4.6	66.8
1997	6,301,900	4,257,400	4,031,000	226,400	5.3	67.6
1996	6,247,200	4,184,100	3,925,800	258,300	6.2	67.0
1995	6,196,900	4,111,800	3,846,300	265,500	6.5	66.4
1994	6,158,200	4,067,500	3,790,000	277,500	6.8	66.0
1993	6,128,500	4,034,600	3,727,300	307,300	7.6	65.8
1992	6,097,400	4,051,900	3,709,500	342,400	8.5	66.5
1991	6,076,000	4,090,400	3,776,600	273,700	6.8	66.7
1990	6,045,500	4,072,500	3,665,000	207,500	5.1	67.4

**Employment by Municipality**

Jobs  
Per Square Mile  
1 - 100  
101 - 800  
801 - 3,000  
Over 3,000



Source: Department of Labor, Rutgers University Center for Urban Policy & Research, 2000.

**New Jersey Department of Labor  
Labor Planning and Analysis  
Labor Market and Demographic Research  
Bureau of Labor Force Statistics**

**New Jersey Annual Average \*  
Unemployment Rate by County: 1990 - 2010**

April 27, 2011

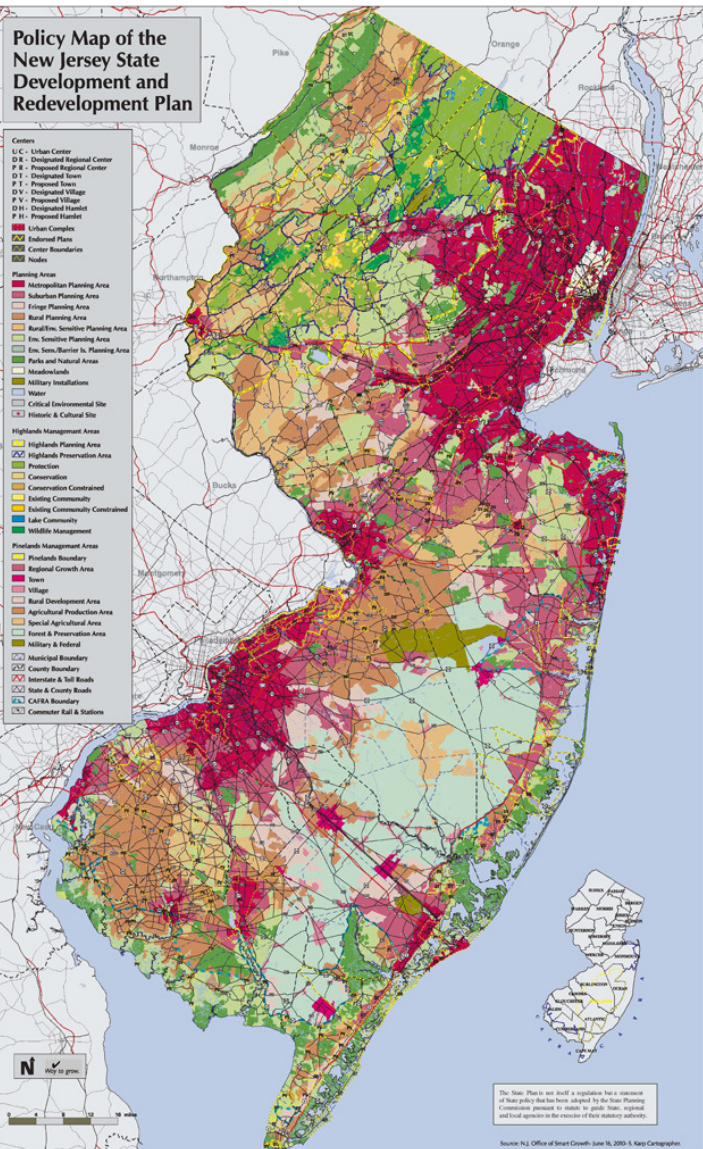
COUNTY	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Atlantic County	6.2	8.9	10.3	9.6	8.7	8.6	8.3	7.7	7.8	7.0	4.7	4.8	6.0	6.2	5.6	5.3	5.7	5.9	7.0	11.9	12.4
Bergen County	3.9	5.4	7.2	6.8	6.2	5.8	5.3	4.5	3.6	3.6	3.1	3.8	5.1	5.1	4.2	3.7	3.9	3.5	4.5	7.8	8.1
Burlington County	4.7	6.3	7.8	6.2	5.3	5.0	4.7	4.0	3.4	3.3	3.1	3.6	4.8	4.8	4.1	3.8	4.1	3.8	5.0	8.4	9.0
Camden County	5.9	7.8	9.2	7.5	6.8	6.5	6.0	5.1	4.5	4.6	3.9	4.4	5.9	6.1	5.3	4.8	5.2	4.8	6.0	9.9	10.6
Cape May County	7.8	10.3	13.2	13.3	12.7	12.2	11.8	11.2	10.5	9.8	6.4	6.7	8.0	8.1	6.9	6.6	6.9	6.6	8.1	11.2	11.9
Cumberland County	7.6	10.1	12.2	11.5	10.5	9.9	9.9	8.9	8.9	8.3	5.8	6.5	7.6	7.9	6.6	6.4	6.9	6.5	8.0	12.5	13.3
Essex County	6.3	8.2	10.0	9.3	8.3	7.7	7.8	6.8	5.6	5.6	4.5	5.4	7.2	7.3	6.2	5.6	5.8	5.4	6.6	10.3	11.0
Gloucester County	5.7	7.6	8.8	7.3	6.7	6.6	6.2	5.1	4.5	4.4	3.6	4.0	5.2	5.4	4.7	4.4	4.7	4.3	5.4	9.2	10.0
Hudson County	7.3	8.8	11.2	10.2	9.3	9.4	9.2	8.1	7.3	7.1	4.8	5.6	7.7	7.4	6.1	5.4	5.5	5.0	6.3	10.5	10.8
Hunterdon County	2.7	3.8	5.1	4.5	3.7	3.2	3.1	2.5	2.2	2.0	2.3	2.8	4.1	4.3	3.4	3.1	3.3	2.9	3.8	6.7	7.0
Mercer County	4.5	5.7	6.6	5.9	5.4	5.5	5.6	4.7	4.1	3.8	3.3	3.8	5.3	5.2	4.3	3.9	4.2	3.8	4.8	7.6	7.8
Middlesex County	4.5	5.8	7.6	6.9	5.8	5.6	5.2	4.3	3.7	3.6	3.3	4.0	5.6	5.5	4.6	4.2	4.3	3.9	5.0	8.5	8.7
Monmouth County	4.2	5.9	7.4	6.3	5.8	5.5	5.3	4.6	4.0	3.9	3.2	3.8	5.3	5.4	4.5	4.1	4.1	3.8	4.9	8.3	8.6
Morris County	3.2	4.9	6.3	5.8	5.0	4.4	4.0	3.4	2.8	2.7	2.6	3.3	4.6	4.6	3.7	3.3	3.3	3.0	4.0	7.1	7.3
Ocean County	5.1	6.9	8.3	7.1	6.6	6.2	6.1	5.5	4.8	4.5	3.7	4.1	5.5	5.8	5.1	4.6	4.9	4.6	5.9	9.5	10.1
Passaic County	6.4	8.2	10.6	10.2	9.4	8.7	8.3	7.0	5.8	6.1	4.6	5.4	7.0	7.3	6.2	5.5	5.6	5.4	6.8	11.0	11.3
Salem County	5.3	7.2	8.5	7.2	6.8	6.6	7.2	5.9	5.1	4.6	3.9	4.4	5.8	6.0	5.3	4.8	5.0	5.0	6.3	10.6	11.3
Somerset County	2.9	4.0	5.2	4.9	4.3	3.8	3.4	2.9	2.5	2.3	2.6	3.3	4.8	4.6	3.7	3.4	3.4	3.1	4.1	7.3	7.4
Sussex County	4.2	6.1	8.0	7.3	6.4	5.8	5.3	4.5	3.6	3.4	2.9	3.7	4.9	5.2	4.4	3.9	4.1	3.9	5.0	8.6	9.3
Union County	5.4	7.0	8.7	8.2	7.2	6.6	6.3	5.6	4.8	4.7	3.9	4.6	6.4	6.3	5.3	4.8	4.9	4.5	5.7	9.3	9.6
Warren County	4.3	6.1	7.8	7.1	6.3	5.8	5.5	4.7	4.0	4.0	2.9	3.5	4.9	5.0	4.4	3.9	4.1	3.8	5.0	8.7	9.1
Statewide	5.1	6.8	8.5	7.6	6.8	6.5	6.2	5.3	4.6	4.5	3.7	4.3	5.8	5.9	4.9	4.5	4.6	4.3	5.5	9.1	9.5

\*: All years on most recent available benchmark.

NOTE: Please refer to the technical note for additional information.

# Policy Map of the New Jersey State Development and Redevelopment Plan

- Centers**
  - U.C. - Urban Center
  - D.R. - Designated Regional Center
  - P.R. - Proposed Regional Center
  - D.T. - Designated Town
  - P.T. - Proposed Town
  - D.V. - Designated Village
  - P.V. - Proposed Village
  - D.H. - Designated Hamlet
  - P.H. - Proposed Hamlet
- Urban Complexes**
  - Urban Complex
  - Center Boundary
  - Nodes
- Planning Areas**
  - Metropolitan Planning Area
  - Suburban Planning Area
  - Fringe Planning Area
  - Rural Planning Area
  - Rural/Env. Sensitive Planning Area
  - Env. Sensitive Planning Area
  - Env. Sensitive/Barrier Is. Planning Area
  - Parks and Natural Areas
  - Military Installations
  - Critical Environmental Site
  - Historic & Cultural Site
- Highlands Management Areas**
  - Highlands Planning Area
  - Highlands Preservation Area
  - Protection
  - Conservation
  - Conservation Constrained
  - Existing Community
  - Existing Community - Environmentally Constrained
  - Lake Community
  - Wildlife Management
  - Planning Area Boundary
- Pinelands Management Areas**
  - Pinelands Boundary
  - Regional Growth Area
  - Town
  - Village
  - Rural Development Area
  - Agricultural Production Area
  - Special Agricultural Area
  - Forest & Preservation Area
  - Military & Federal
  - HMDC: Meadowslands
- Other**
  - County Boundary
  - Intermediate & Toll Roads
  - State & County Roads
  - CAFEA Boundary
  - Commuter Rail & Stations



The State Plan is not itself a regulation but a statement of state policy that has been adopted by the State Planning Commission pursuant to statute to guide state, regional and local agencies in the exercise of their statutory authority.

Source: NJ Office of Smart Growth- June 16, 2005-1. Kapp Cartography.

# Draft Final Policy Map of the New Jersey State Development and Redevelopment Plan

## DESIGNATED CENTERS

- ★ Urban Centers
- ☆ Regional Centers
- Towns
- Villages
- Hamlets

## PLANNING AREAS

- PA1 Metropolitan Planning Area
- PA2 Suburban Planning Area
- PA3 Fringe Planning Area
- PA4 Rural Planning Area
- PA4B Rural/Env. Sensitive Planning Area
- PA5 Environmentally Sensitive Planning Area
- PA5B Env. Sensitive/Barrier Islands Planning Area
- Parks & Natural Areas
- Military Installations

## HIGHLANDS PRESERVATION AREA OVERLAY ZONES

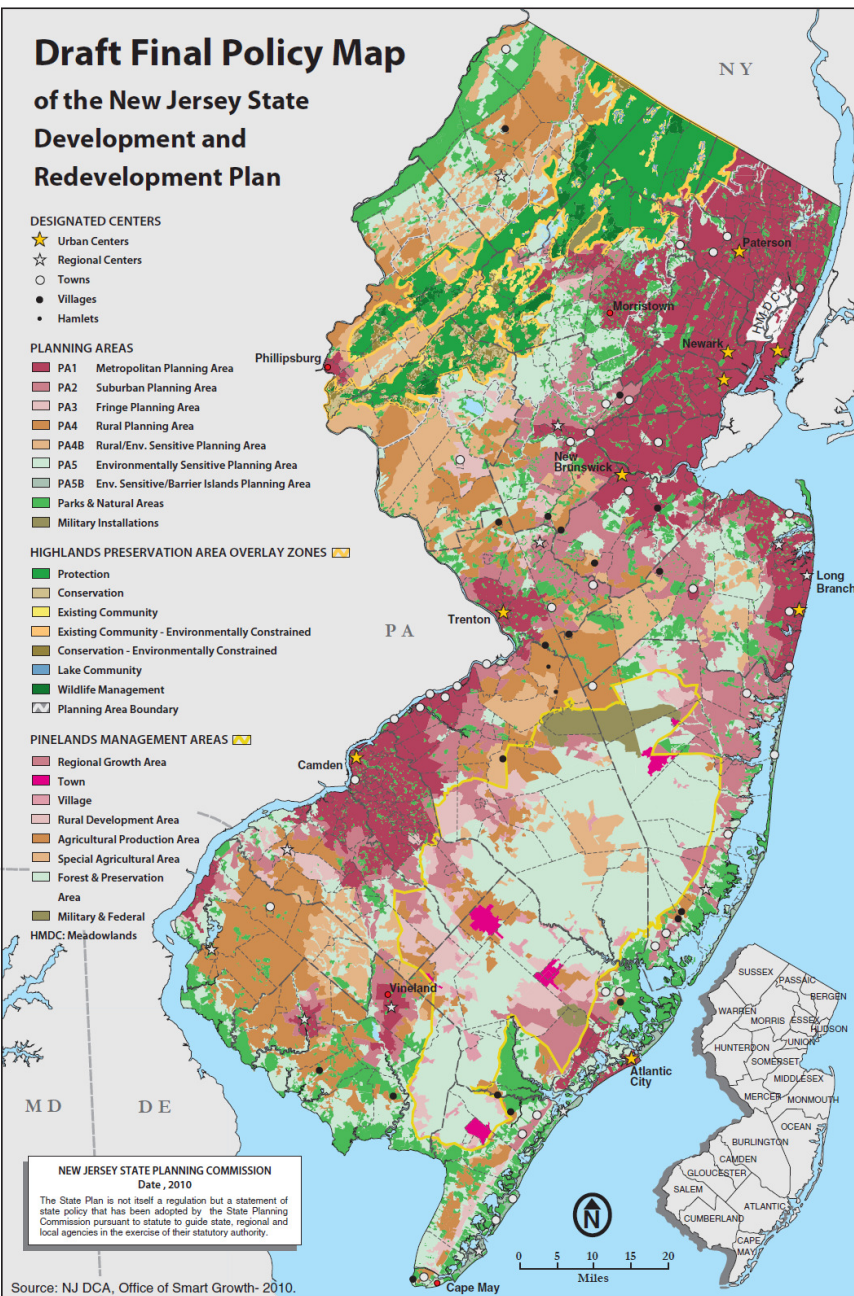
- Protection
- Conservation
- Existing Community
- Existing Community - Environmentally Constrained
- Conservation - Environmentally Constrained
- Lake Community
- Wildlife Management
- Planning Area Boundary

## PINELANDS MANAGEMENT AREAS

- Regional Growth Area
- Town
- Village
- Rural Development Area
- Agricultural Production Area
- Special Agricultural Area
- Forest & Preservation Area
- Military & Federal
- HMDC: Meadowslands

## NEW JERSEY STATE PLANNING COMMISSION Date, 2010

The State Plan is not itself a regulation but a statement of state policy that has been adopted by the State Planning Commission pursuant to statute to guide state, regional and local agencies in the exercise of their statutory authority.

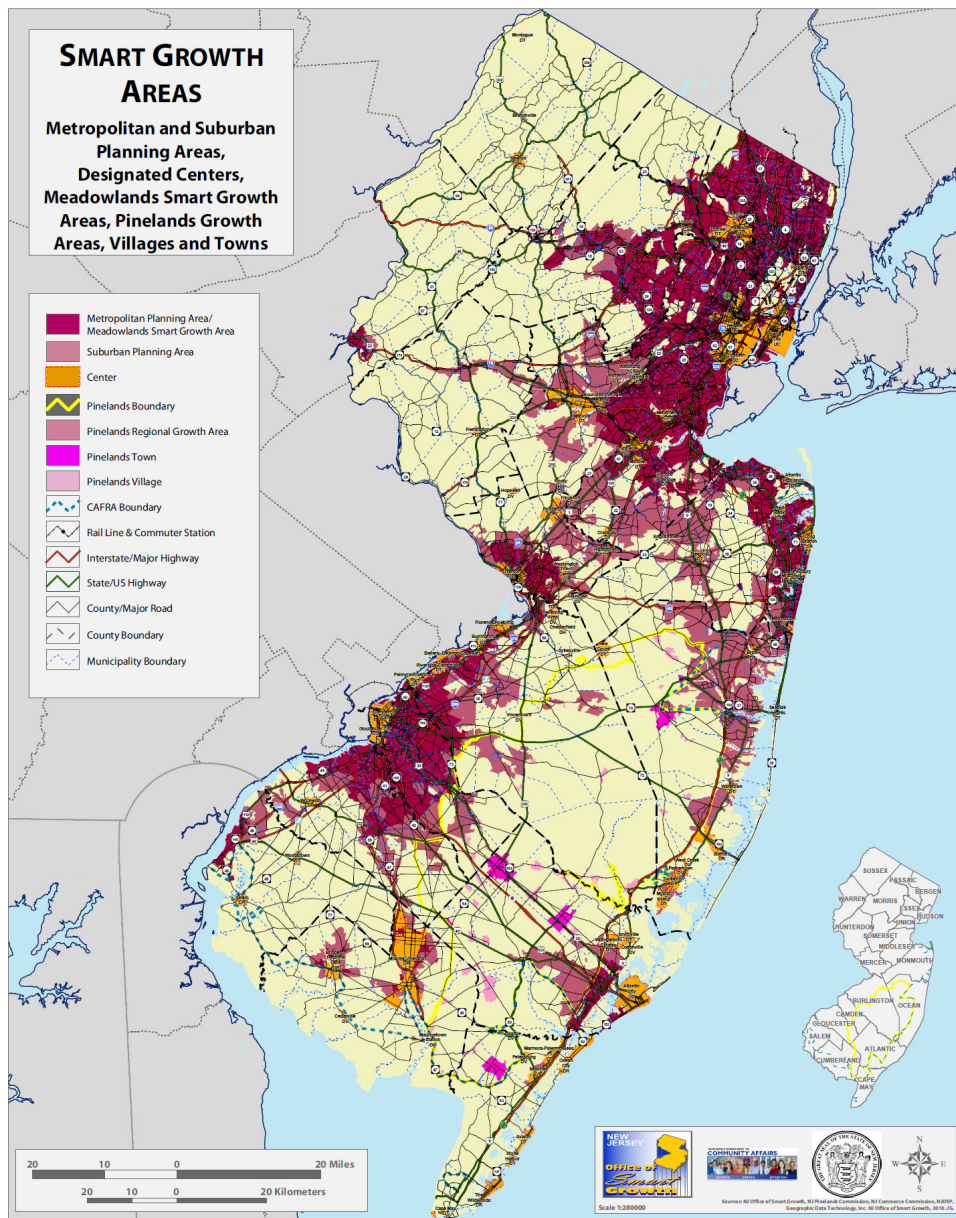


Source: NJ DCA, Office of Smart Growth- 2010.

# SMART GROWTH AREAS

Metropolitan and Suburban Planning Areas, Designated Centers, Meadowlands Smart Growth Areas, Pinelands Growth Areas, Villages and Towns

- Metropolitan Planning Area/ Meadowlands Smart Growth Area
- Suburban Planning Area
- Center
- Pinelands Boundary
- Pinelands Regional Growth Area
- Pinelands Town
- Pinelands Village
- CAFRA Boundary
- Rail Line & Commuter Station
- Interstate/Major Highway
- State/US Highway
- County/Major Road
- County Boundary
- Municipality Boundary



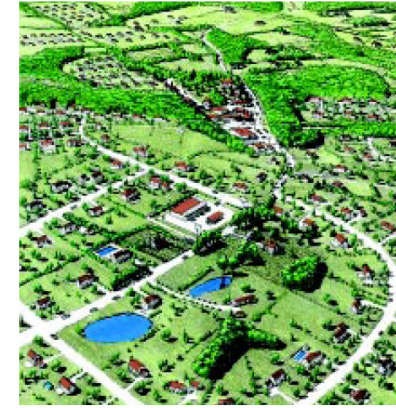
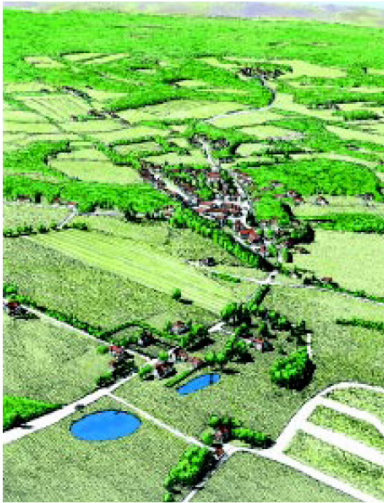
Source: NJ Office of Smart Growth, NJ Office of Community Affairs, NJ Office of Smart Growth, 2010. JLC

Scale 1:280000

## Rural Village



**Existing Conditions:** Parts of New Jersey still exhibit a predominantly rural landscape, with compact towns and village centers surrounded by farms, woodland and rural hamlets. Farmland and open space forms a continuous, productive landscape, with a mosaic of woodlands, hedgerows and small fields providing important wildlife habitat. Buildings are clustered in villages, hamlets and farmsteads with traditional architecture that harmonizes with the natural setting. The character of this rural landscape is an important asset for New Jersey, yet much is currently zoned for large-lot suburban sprawl.



**Trend Development:** Suburban development destroys farmland, open space and natural features. Rigid zoning codes create homogenous tracts of single-family homes on large lots, overwhelming the original village. Individual septic systems are more likely to pollute the groundwater and conflict with wells. Local roads become congested. The traditional, locally based economy withers. The area has lost its rural character.

**Plan Development:** The rural village has grown and prospered, with new mixed-use development occurring in or adjacent to the center. New buildings share or complement the character and appearance of existing structures. New development outside the village occurs in hamlets or in carefully sited estate lots. Extensive areas of farmland and woodlands are maintained. Headwaters and groundwater recharge areas are protected. Natural systems handle wastewater and stormwater. Greenway corridors link communities, providing public access to the countryside. The scenic qualities of a rural community are protected and enhanced, while the local economy is preserved.

## Rural Valley



**Existing Conditions:** A rural valley comprises about 1,000 acres of open and wooded land, farms, ponds and streams. While there are several vibrant traditional hamlets and villages nearby, and the community enjoys the valley's scenic vistas, the entire area is zoned for residential development, with an inflexible two-acre minimum lot size. There is considerable pressure to develop the valley with large, expensive homes, given its proximity to several major corporate employment centers.



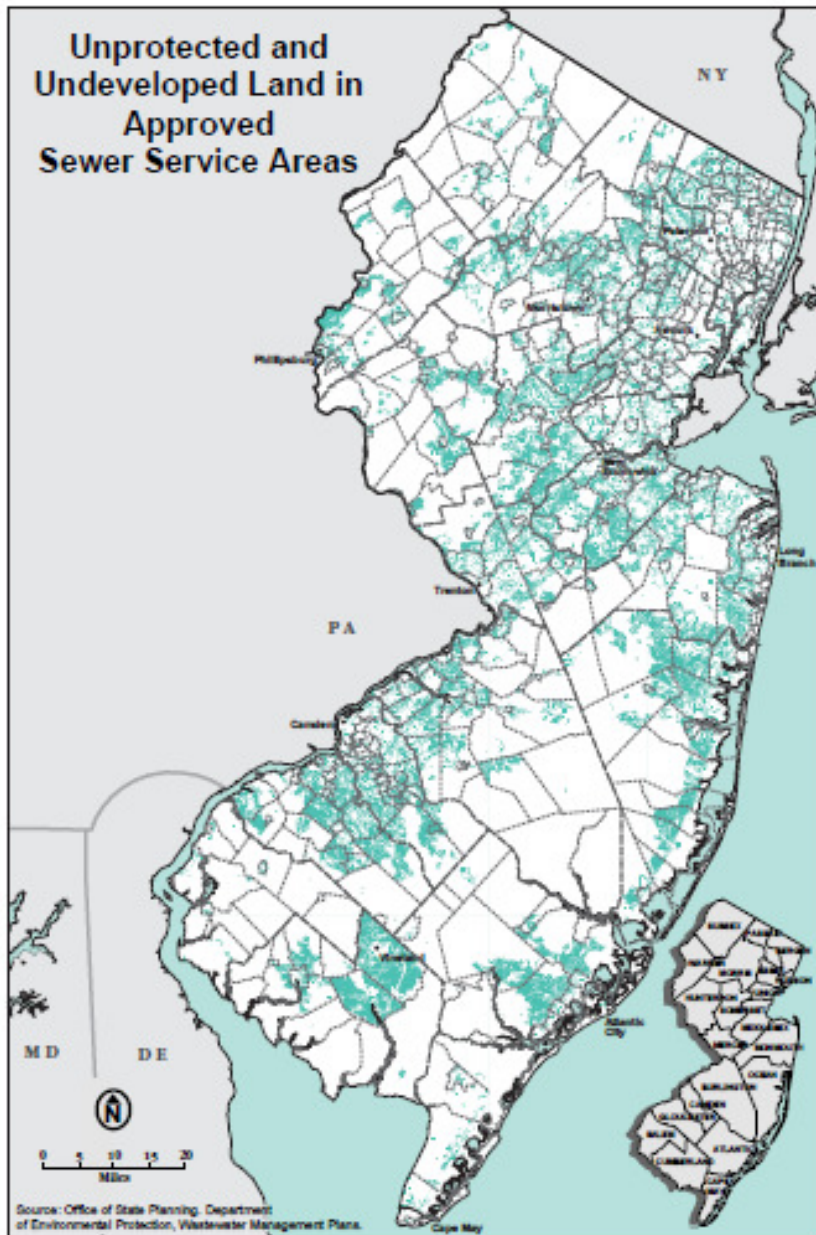
**Trend Development:** Conventional zoning formulas result in about 300 residential lots. The entire valley is carved up into land holdings, too small to protect farmland or provide open space and too large to provide for affordable housing, while completely destroying its scenic character. Much of the original vegetation is removed. New roads intersect the valley, and residents must drive to almost any activity. The valley's special character has been lost, replaced by an anonymous suburban landscape.



**Plan Development:** The community replaces its conventional zoning and adopts a flexible, design intensive code. This allows development of the same 300 houses, but clustered in a village, leaving scenic vistas intact and 85 percent of the valley as open space. Helping to provide affordable housing, residential lot sizes in the village can reach 7,500 square feet—a traditional village lot. Design techniques such as shared driveways and rear alleys—borrowed from historic hamlets and villages in the region—allow for improvements in density and quality of life. The new village has a small mixed-use center,

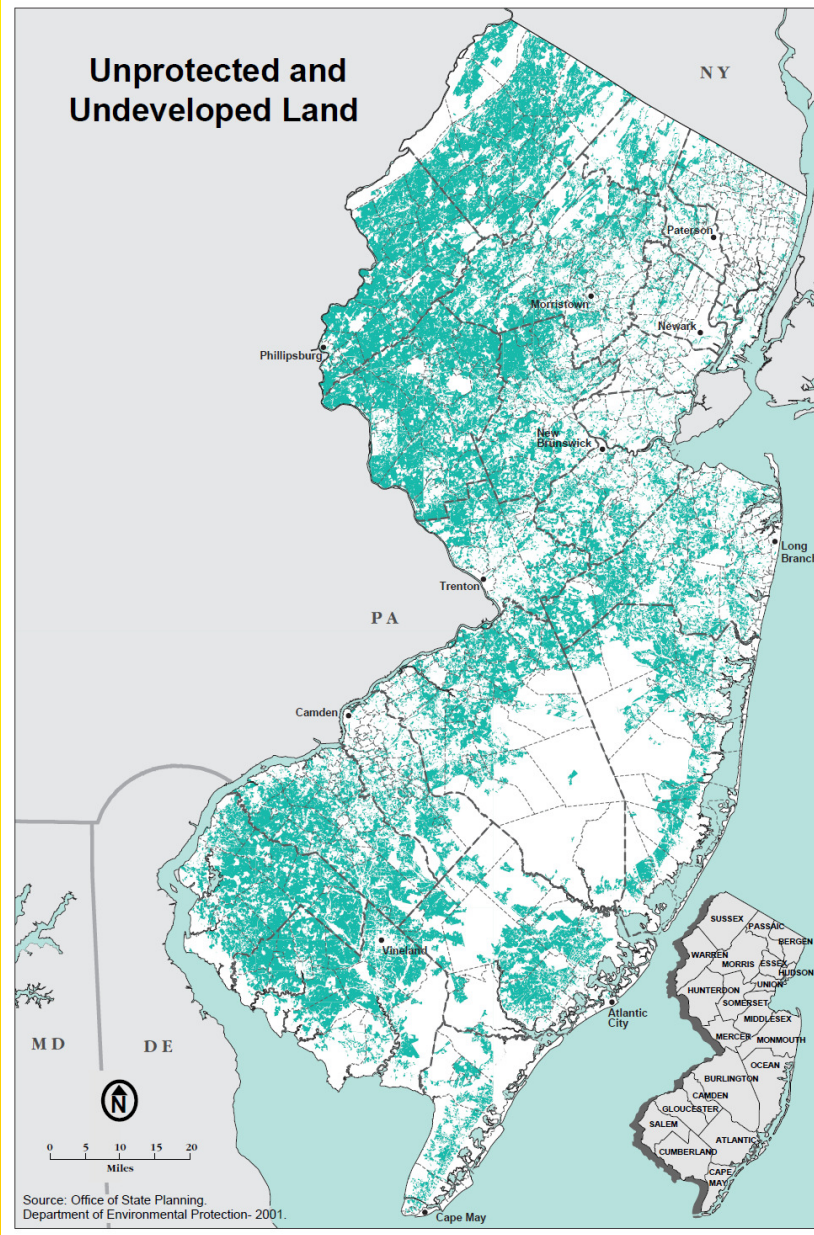
with a community building, recreation facilities, a few shops and office space for local professionals. The surrounding open countryside is preserved, through land acquisition or easements. Negative environmental impacts of development have been minimized. The valley provides an enduring place for human habitation in proximity to natural landscapes.

# Unprotected and Undeveloped Land in Approved Sewer Service Areas

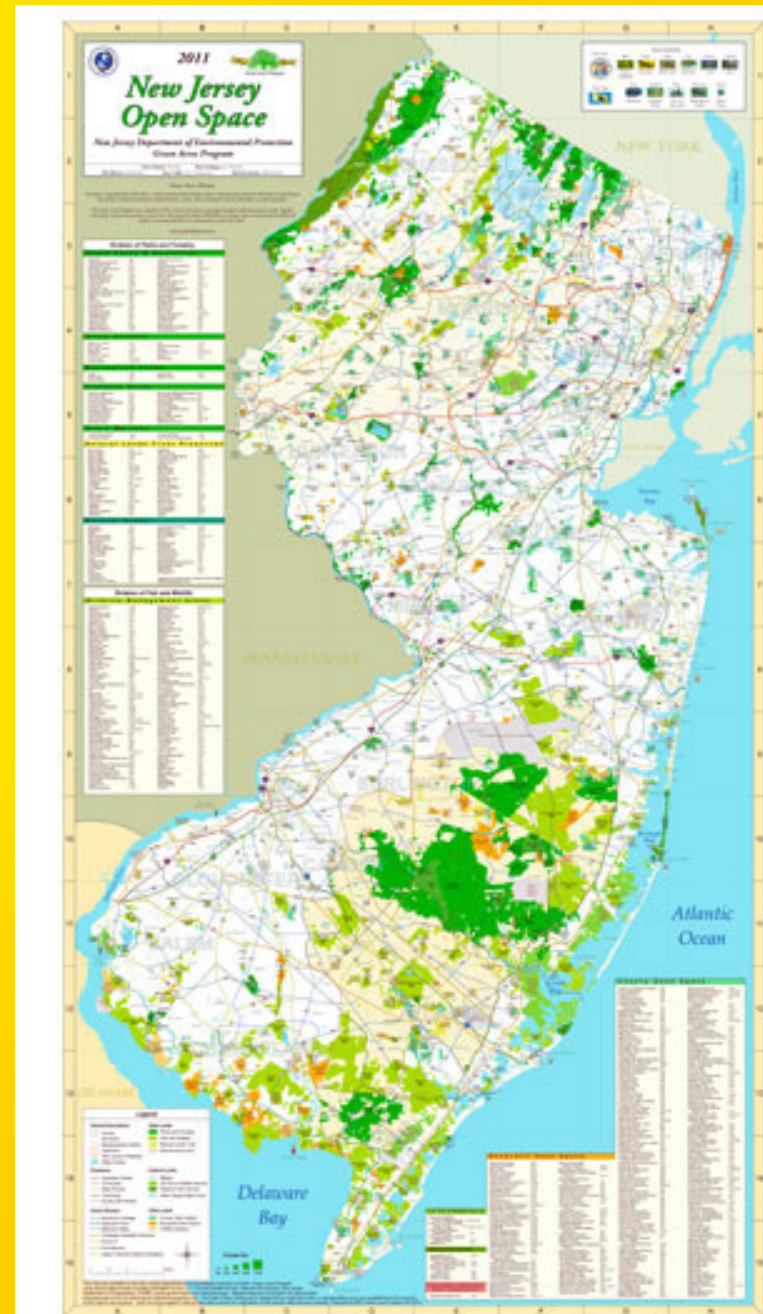
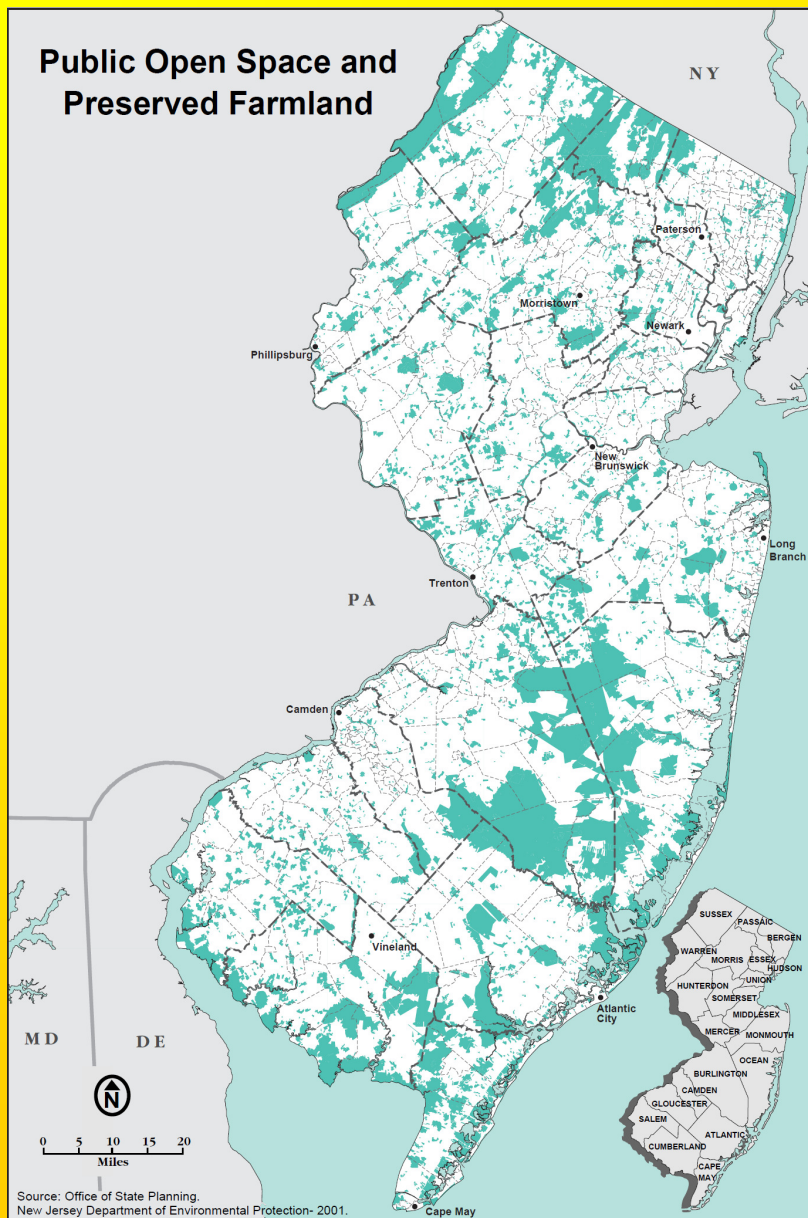


Source: Office of State Planning, Department of Environmental Protection, Wastewater Management Plans.

# Unprotected and Undeveloped Land



Source: Office of State Planning, Department of Environmental Protection- 2001.



## Impact Assessment of the New Jersey State Development and Redevelopment Plan



### I. TREND PROJECTIONS II. PLAN PROJECTIONS:

- **POPULATION**
- **HOUSEHOLDS**
- **HOUSING UNITS**
- **EMPLOYMENT**

### New Jersey, by Municipality and County: 2000–2008 2008–2028

*Prepared by:*

Robert W. Burchell, PhD  
William R. Dolphin, MA

*Prepared for:*

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NEW JERSEY DEPARTMENT OF COMMUNITY AFFAIRS  
Office of Smart Growth  
101 South Broad Street  
P.O. Box 204  
Trenton, New Jersey

DECEMBER 11, 2009

### POPULATION PROJECTIONS

#### Projected Population Growth— TREND and PLAN†

State of New Jersey, 2000–2028

Year (April)	Population	Change from Prior Period
2000	8,414,350	
2004	8,620,770	
2008	8,682,661	268,311
2013	8,804,367	
2018	8,973,685	
2023	9,185,948	
2028	9,428,438	745,777

### HOUSING-UNIT PROJECTIONS

#### Projected Housing-Unit Growth— TREND and PLAN

State of New Jersey, 2000–2028

Year	Housing Units	Change from Prior Period
2000	3,310,275	
2004	3,414,916	
2008	3,517,293	207,018
2013	3,557,696	
2018	3,617,068	
2023	3,693,400	
2028	3,781,464	264,171

Source: 2000–2008 U.S. Census estimates

### HOUSEHOLD PROJECTIONS

#### Projected Household Growth— TREND and PLAN

State of New Jersey, 2000–2028

Year	Households	Change from Prior Period
2000	3,064,645	
2004	3,158,797	
2008	3,251,044	186,399
2013	3,293,448	
2018	3,353,564	
2023	3,429,599	
2028	3,516,762	265,718

### EMPLOYMENT PROJECTIONS

#### Projected Employment Growth— TREND and PLAN

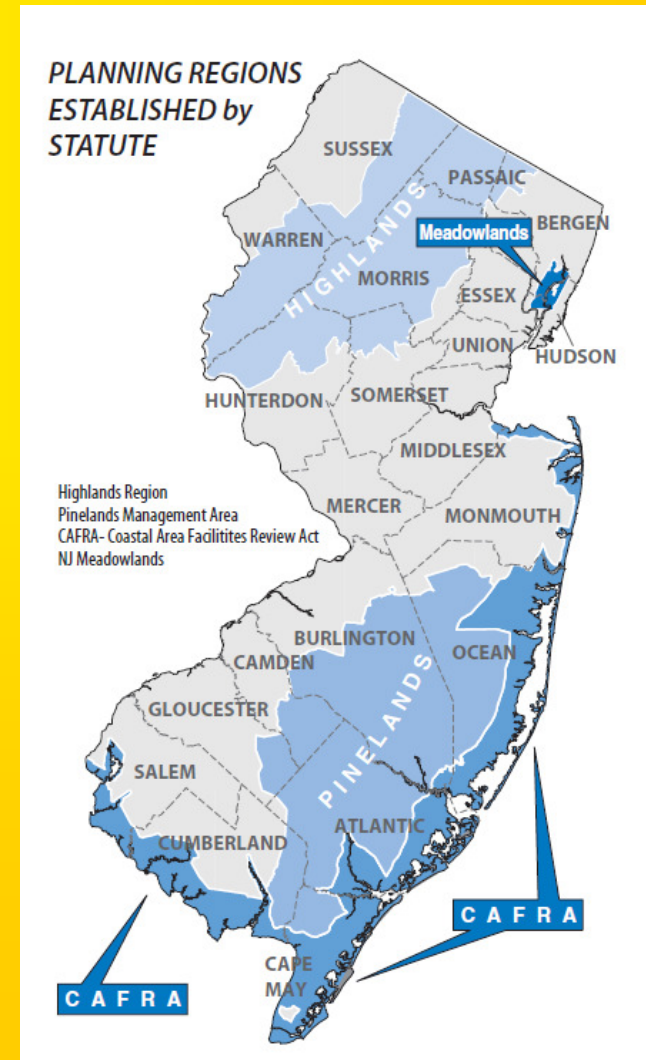
State of New Jersey, 2000–2028

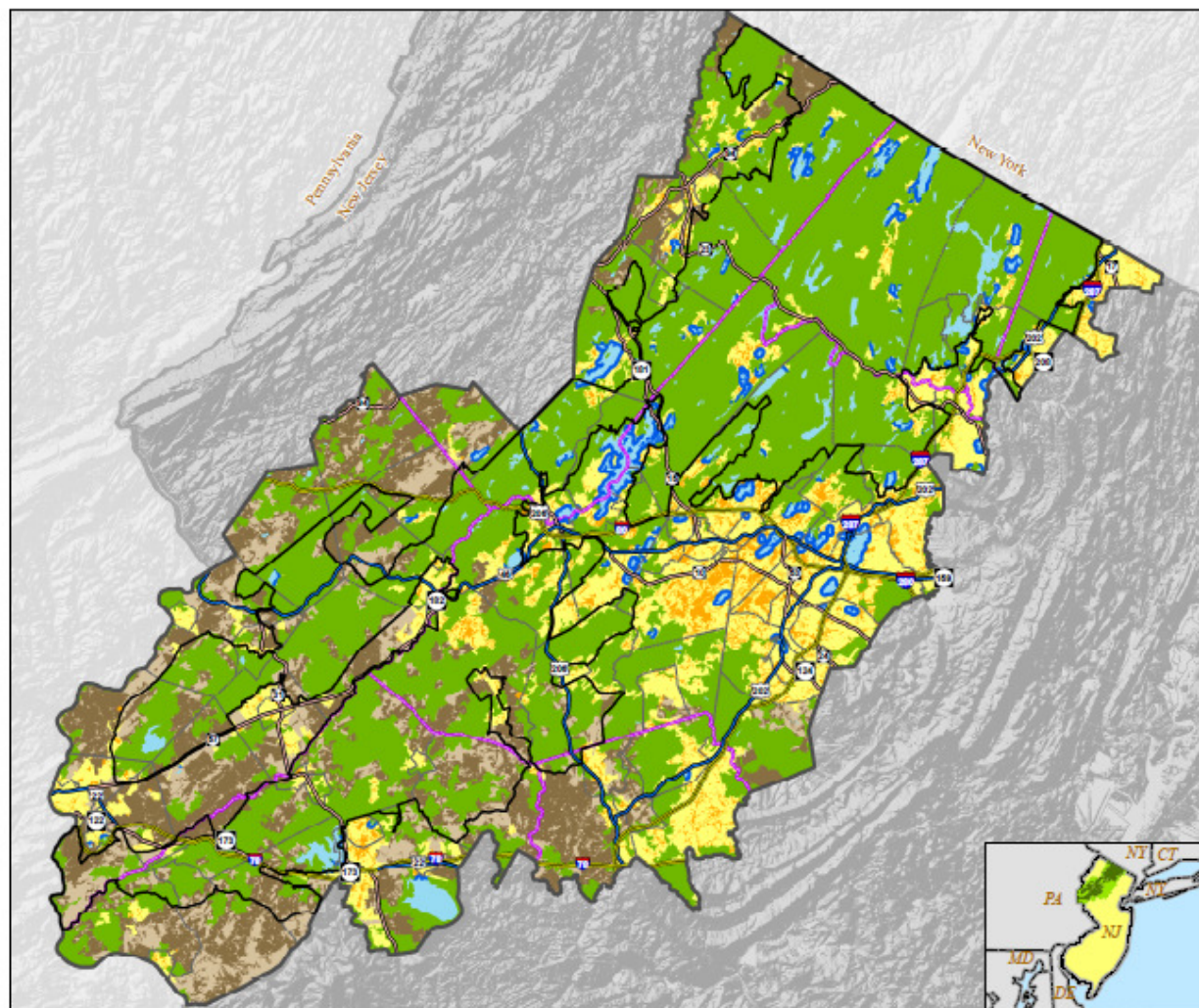
Year (December)	Employment	Change from Prior Period
2000	4,023,900	
2004	4,021,400	(–2,500)
2008	4,000,500	(–20,900)
2013	3,866,500	(–134,000)
2018	3,986,500	+120,000
2023	4,091,500	+105,000
2028	4,262,500	+171,000

Source: 2000–2008 Bureau of Labor Statistics,  
Total Nonfarm Employment

# State Development and Redevelopment Plan Special Resource Planning Areas

- Pinelands
- Highlands
- Meadowlands
- CAFRA
- Sourlands
- Delaware Bayshore
- Raritan Bayshore
- Liberty Corridor





# Highlands Regional Master Plan Final Draft

## LAND USE CAPABILITY Zone Map (Map 1 of 5)

Source:  
New Jersey Highlands Council, 2007

### Legend

Preservation Area Boundary	Administrative Boundaries
Highlands Boundary	County Boundaries
Roadway Network	Municipal Boundaries
Interstate Highways	Lakes Greater Than 10 Acres
U.S. Routes	
State Routes	

### Regional Master Plan Overlay Zone Designation

Zone	Sub-Zone
Protection	Lake Community
Conservation	Conservation Constrained
Existing Community	Existing Community Constrained

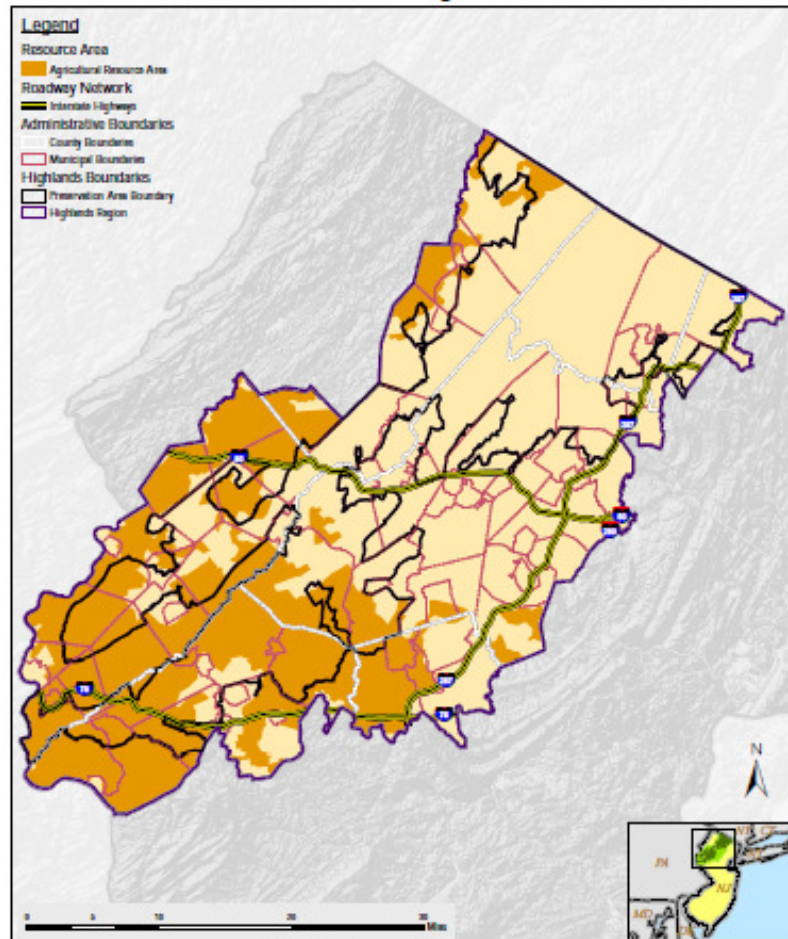


The information contained on this map is the best available according to the Highlands Council. However, unintentional inaccuracies may occur, particularly where data or information is derived from sources other than the Highlands Council. The Highlands Council cannot be responsible for the misuse or misinterpretation of the information presented herein. Therefore, under no circumstances shall the State of New Jersey or specifically the Highlands Council be liable for any actions taken or inactions made from reliance on any information contained herein from whatever source one shall the State be liable for any other consequences from any such reliance. Additional sources of information may include NJDOT and NJDEP GIS digital data, but this secondary product has not been verified by NJDEP.

Prepared By:  
New Jersey Highlands Council  
November 2007



## Agricultural Resource Area

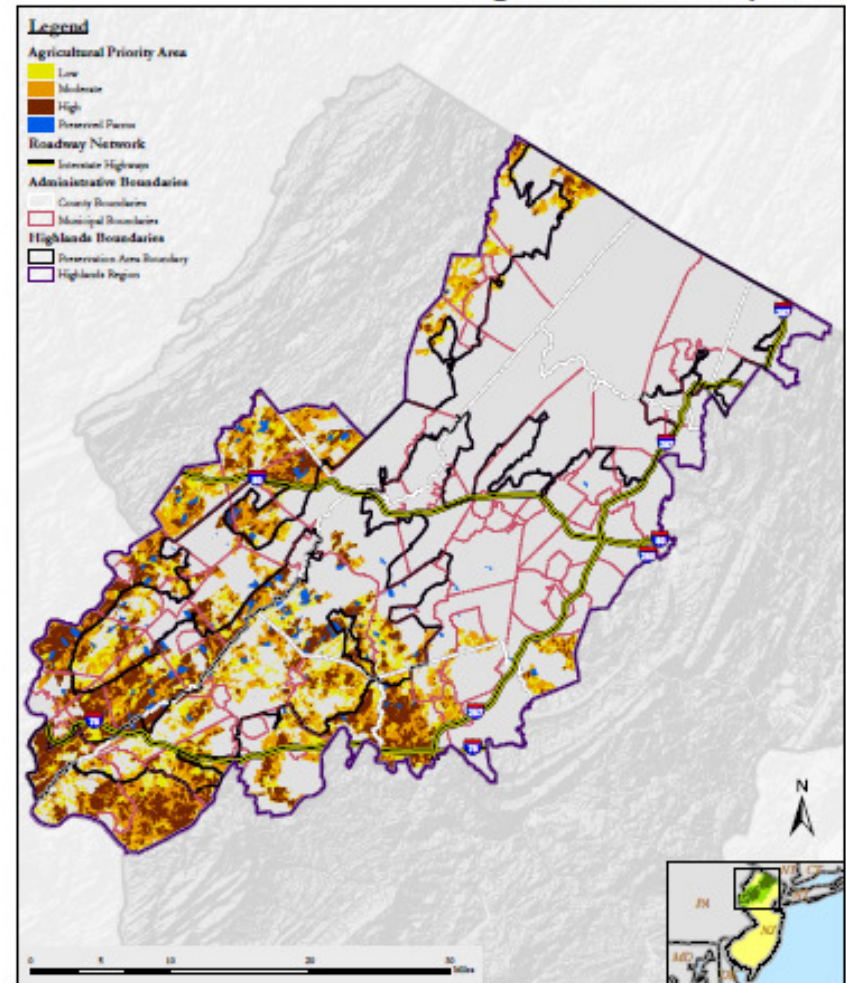


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**Highlands Regional Master Plan**  
Final Draft, November 2007

**Highlands Council**  
New Jersey  
Source:  
New Jersey Highlands Council, 2006

## Agricultural Priority Area



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**Highlands Regional Master Plan**  
Final Draft, November 2007

**Highlands Council**  
New Jersey  
Source:  
New Jersey Highlands Council, 2007  
State Agriculture Development Committee, 2006

**Approved Municipalities** (Parentheses: Resolution does not include the Planning Area)

**Approved Municipalities** (Parentheses: Resolution does not include the Planning Area)

Bethlehem Township	Hampton Borough
Byram Township	High Bridge Borough**
Califon Borough	Lebanon Borough*
Chester Township	Mahwah Township
Clinton Town	(Mount Olive Township)
(Denville Township)	Rockaway Township
Glen Gardner Borough	Tewksbury Township
(Green Township)	West Milford Township

### Petitioning Municipalities

Alexandria Township	Lepington Township
(Altamonte Township)	(Merrillville Township)
Alpha Borough*	(Mount Arlington Borough)
(Bedminster Township)	(Oldland Borough)
Bloomfield Borough	(Ogdensburg Borough)
Bloomhurst Borough	(Oxford Township)
(Bosmont Township)	Parkway-Troy Hills Township*
Clinton Township	(Pequannock Township)
Fair Hills Borough*	Phillipsburg Towne*
(Franklin Township)	Pohatcong Township
Greenwich Township	Randolph Township
(Hackensack Towne)	Ringwood Borough
(Haddonfield Township)	(Roxbury Township)
(Harmony Township)	(Sparta Township)
Holland Township	Stanhope Borough*
(Hopatcong Borough)	Union Township
(Independence Township)	(Verona Township)
(Jefferson Township)	Wanaque Borough
Kinnelon Borough	Washington Township, Morris
Lebanon Township	Washington Township, Warren
(Liberty Township)	Whites Borough*
	(Whitman Township)

\* Municipalities entirely within Highlands Planning Area

**^ Ordinance Introduced**

### Preservation Area

April 4, 2011

A horizontal scale bar with markings at 0, 5, 10, 15, and 20 miles. The bar is divided into segments by vertical lines. The segments from 0 to 5 and 10 to 15 are solid black. The segments from 5 to 10 and 15 to 20 are white with black outlines. The word "Miles" is centered below the bar.



Regional Master Plan Overlay Zone Designation

Zone

 Protection	 Lakes Greater Than 50
 Conservation	 Preservation Area
 Existing Connectivity	 Municipal Boundaries

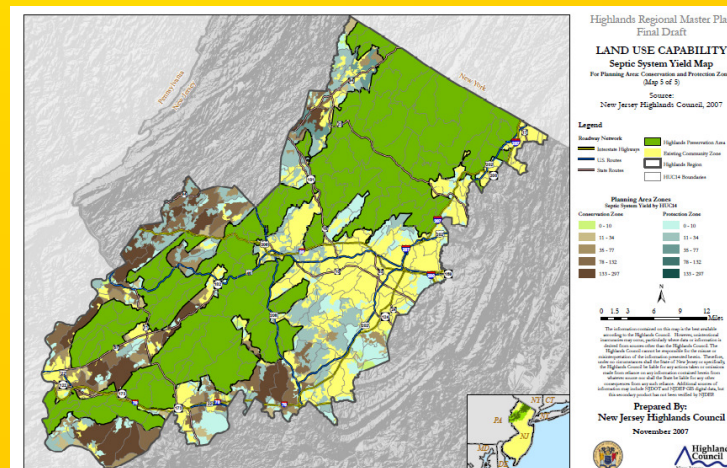
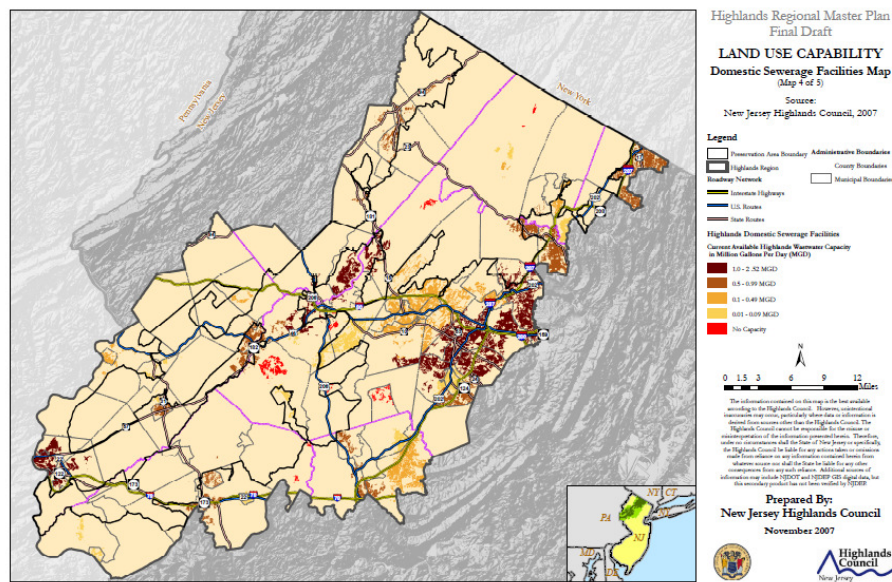
**POHATCONG TOWNSHIP**

**Exhibit A: Township Highlands Area**

1 inch = 0.772 miles



Highlands Council  
New Jersey

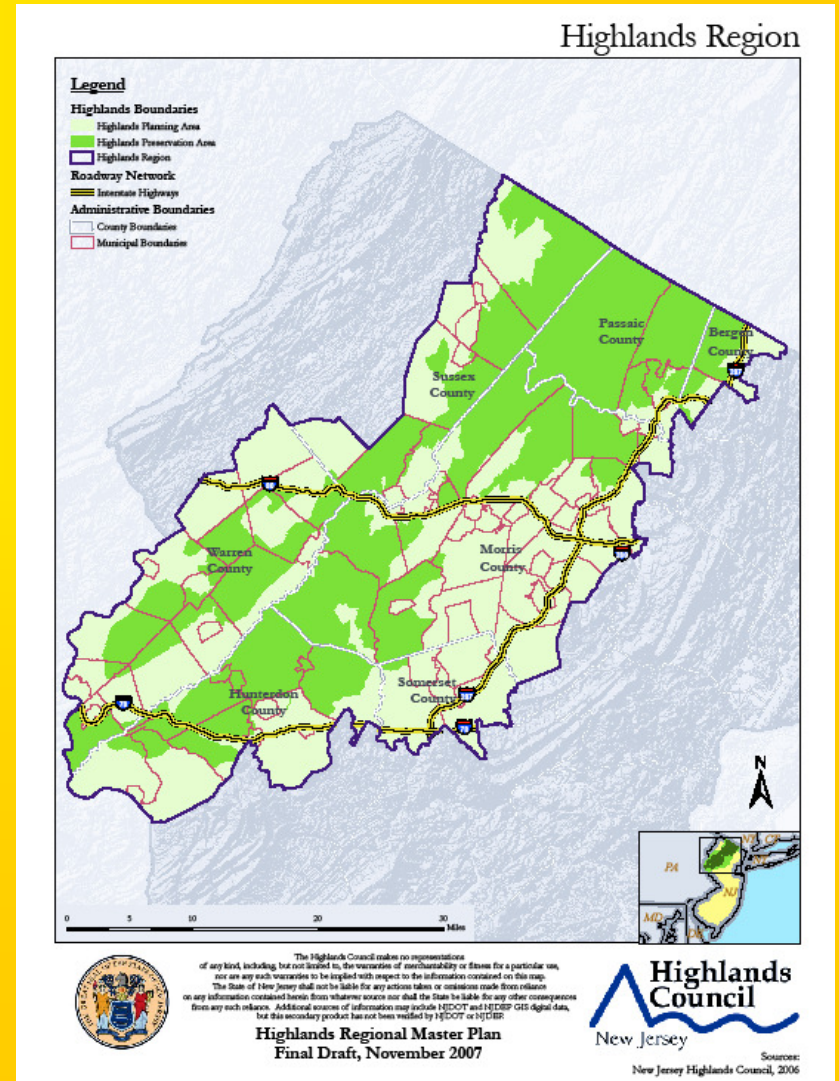


# TDR in the New Jersey Highlands

## New Jersey Highlands Region

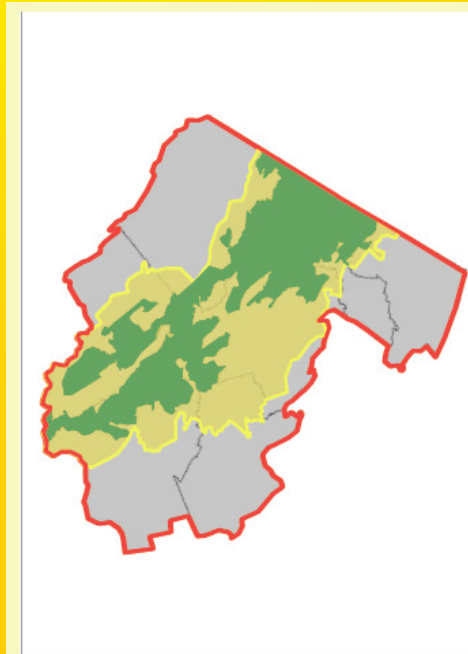
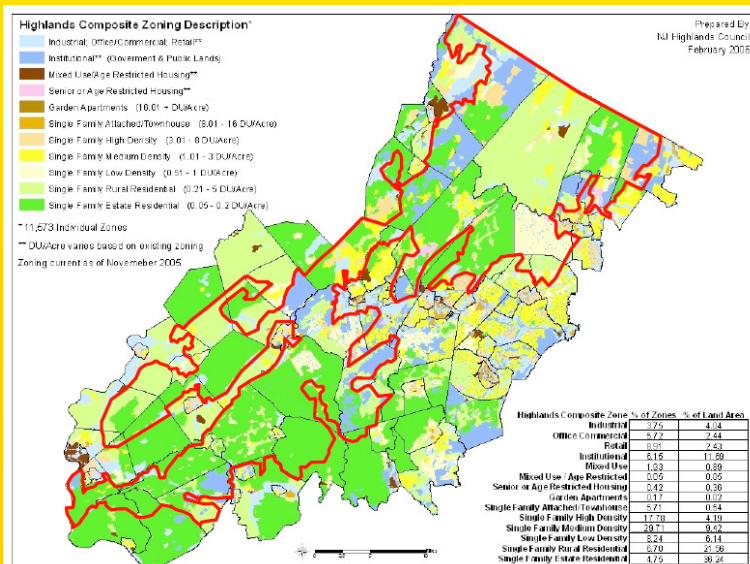
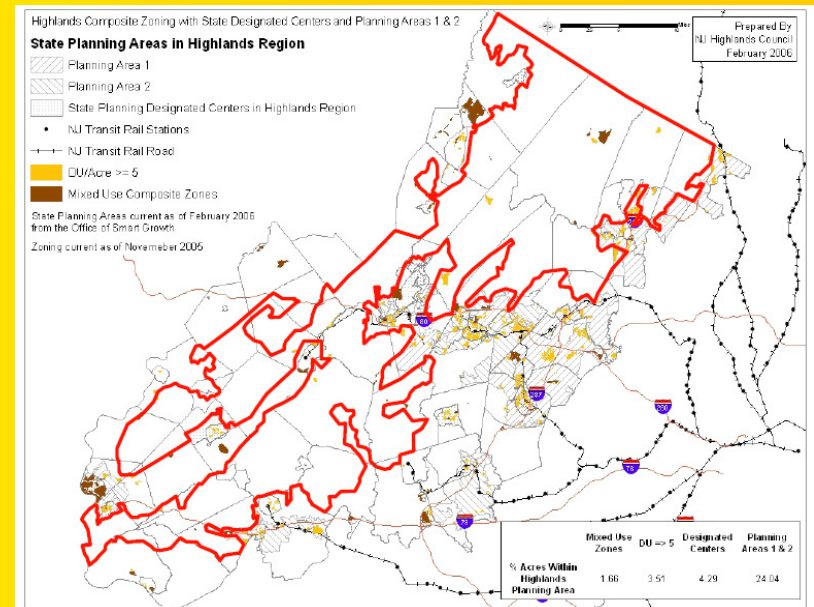
- 2004 New Jersey Highlands Act
- Scale of the Program
  - 850,000 acres
  - 88 Highlands Municipalities
  - 7 Counties
  - High Geographic diversity
- Broad diversity in Land Use intent and values
- Existing and Planned infrastructure and geographic differences
- TDR identified as primary equity compensation tool

Image courtesy of New Jersey Highlands Council



## Highlands TDR Program Objectives

- Preservation of ecologically, agriculturally, historically or culturally important lands of the Highlands Region
- Ensure landowner equity for those properties impacted by Highlands Act



## Voluntary TDR Receiving Zone

### Seven Highlands Counties

Bergen	= 145,634 acres
Hunterdon	= 214,964
Morris	= 187,029
Passaic	= 47,968
Somerset	= 194,093
Sussex	= 272,063
Warren	= 165,047
<b>TOTAL</b>	<b>= 1,226,798 acres</b>

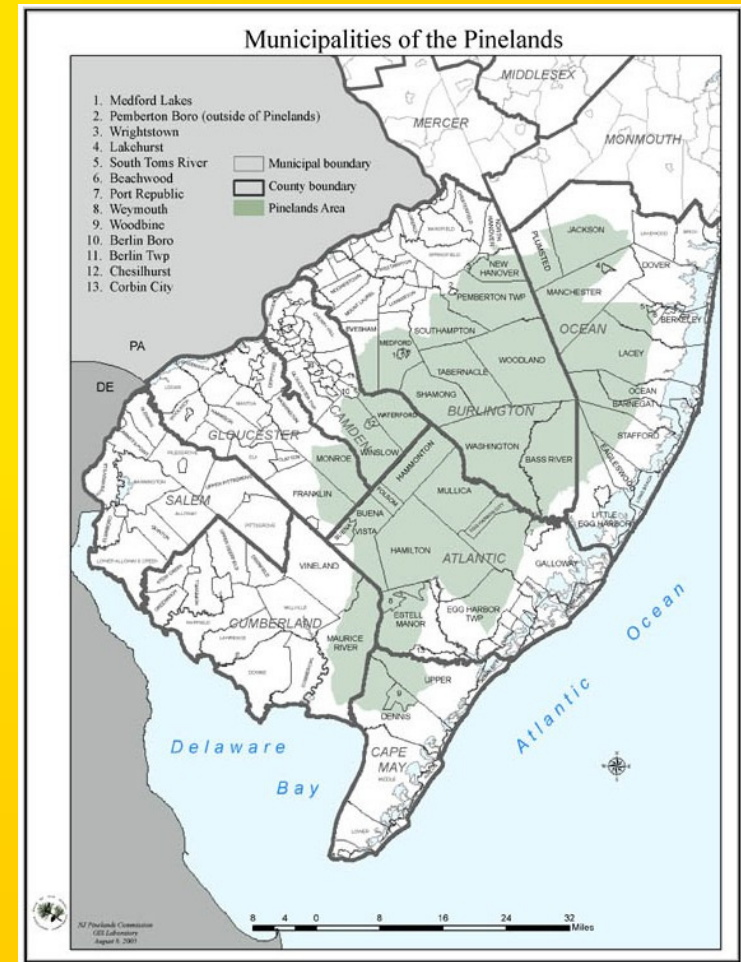
**213 Qualifying Municipalities**

# New Jersey Pinelands Development Credit Program



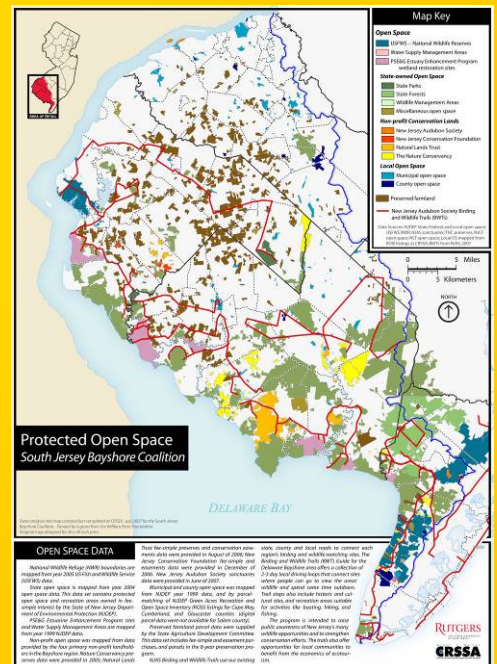
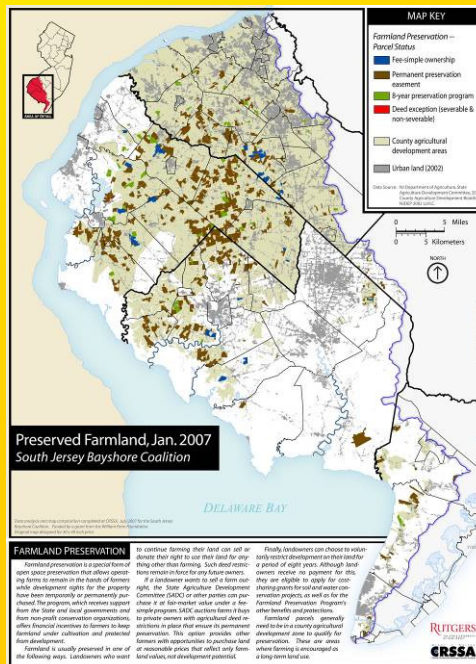
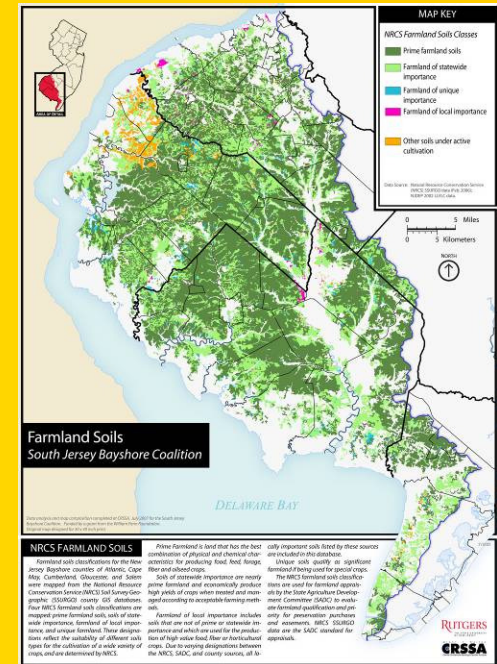
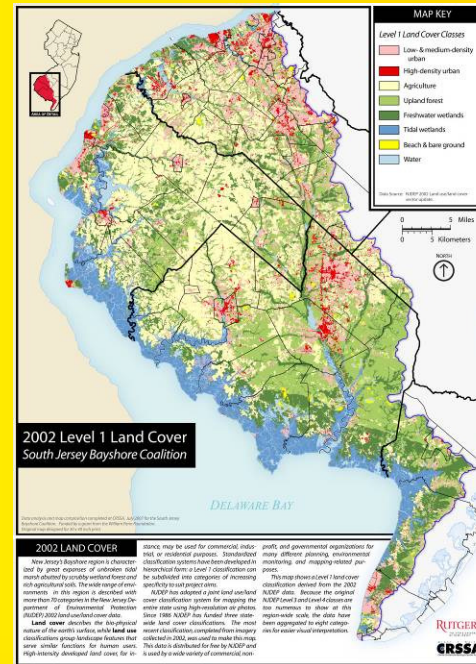
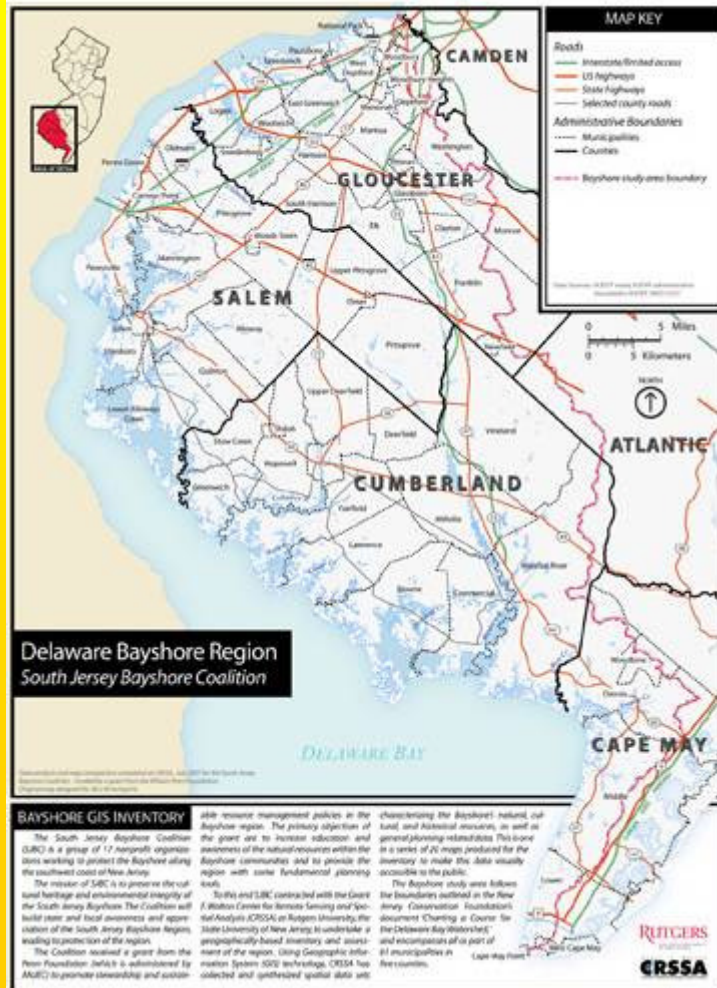
## 1979 Pinelands Protection Act

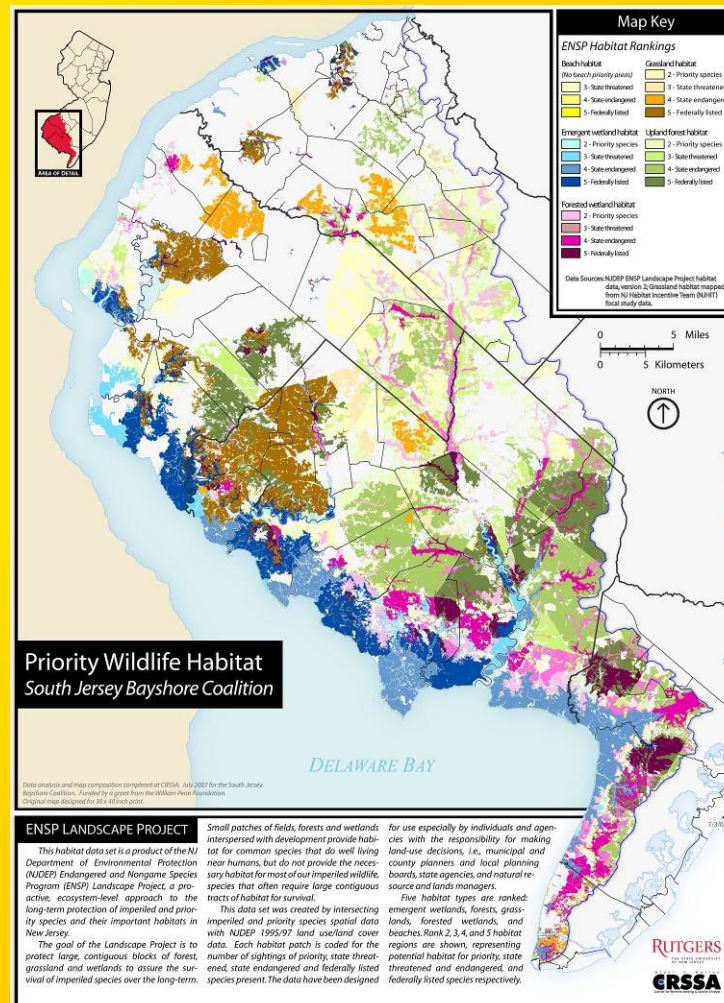
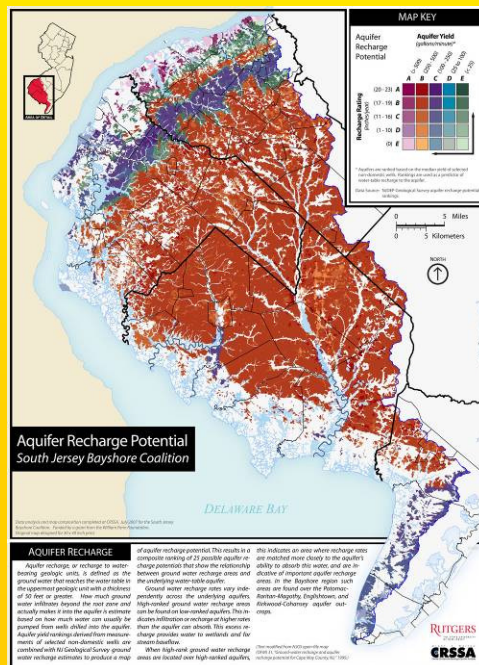
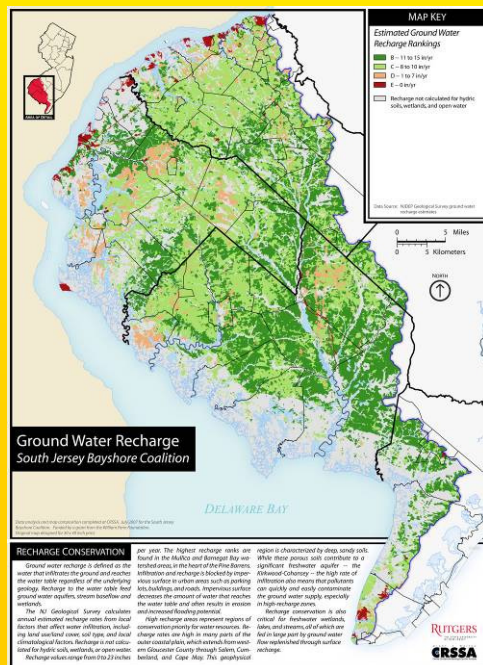
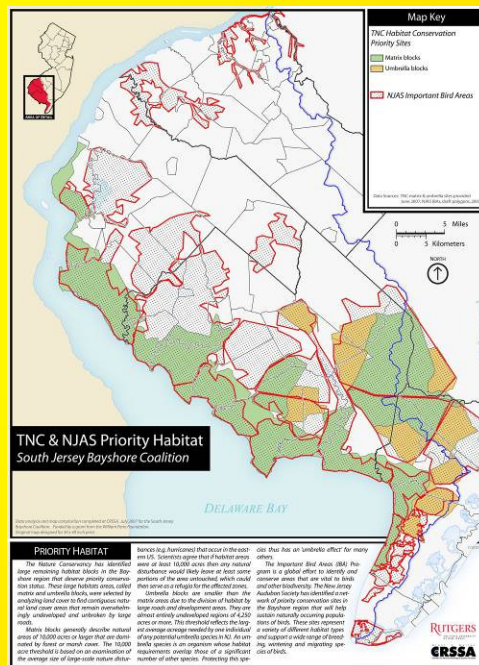
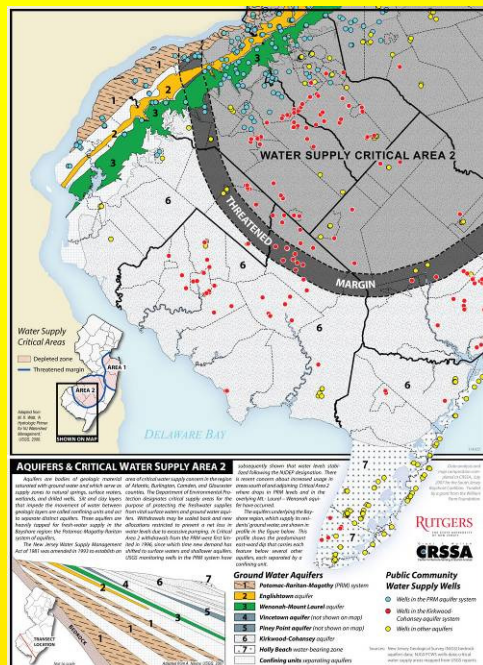
- Regional Growth Areas identified
- Preservation Areas identified & down-zoned
- TDR (PDC) program established 1981
  - Base zoning 1-4.5 du/ac
  - PDCs add 0.5-1.5 additional du/ac.
- Supreme court challenge defeated
- 5,800 development rights severed
- 600 projects; 4,500 units built/scheduled
- 50,000 acres preserved thru PDC program



# Delaware Bayshore

**Preview:** Bayshore Region Basemap





## ENSP LANDSCAPE PROJECT

This habitat data set is a product of the NJ Department of Environmental Protection (NJDEP) Endangered and Nongame Species Program (ENSP) Landscape Project, a proactive, ecosystem-level approach to the long-term protection of imperiled and priority species and their important habitats in New Jersey.

The goal of the Landscape Project is to protect large, contiguous blocks of forest, grassland and wetlands to assure the survival of imperiled species over the long-term.

Small patches of fields, forests and wetlands interspersed with development provide habitat for common species that do well living near humans, but do not provide the necessary habitat for most of our imperiled wildlife species that often require large contiguous tracts of habitat for survival.

Five habitat types are ranked: emergent wetlands, forests, grasslands, forested wetlands, and beaches. Rank 2, 3, 4, and 5 habitat regions are shown, representing potential habitat for priority, state threatened and endangered, and federally listed species respectively. The data have been designed for use especially by individuals and agencies with the responsibility for making land-use decisions, i.e., municipal and county planners and local planning boards, state agencies, and natural resource and lands managers.

**RUTGERS**  
CRSSA

# Sourland Mountains

## Central New Jersey's Last Great Wilderness



In 1929, Charles Lindbergh, the most celebrated man in America, built Highfields in the secluded Sourlands. The famous Lindbergh kidnapping took place here in 1932.



This aerial view shows development encroaching on all sides of the environmentally critical Sourland forest.



Hunt House, with a commanding view of Hopewell Valley, was built in 1752. Here, in 1770, George Washington hosted a grand council of Revolutionary leaders.



Area of Detail



Topography

© 2008 Sourland Planning Council

Find more information and links at [www.Sourland.org](http://www.Sourland.org)

Legend

Forest  
Agriculture  
Development  
Wetlands  
Water  
Quarries  
Roads  
Municipal Borders  
Villages  
Former Village Sites

Scale

1 inch = 0.5 miles

Parks and Preserves

1 Sourland Mountain Preserve (Somerset County), 2,870 acres  
2 Sourland Mountain Nature Preserve (Hunterdon County), 273 acres  
3 McBurney Woods Preserve, 1,200  
4 Somner Park Preserve and Migratory Bird Monitoring Station, 80 acres  
5 Laporte Reserve, 49 acres  
6 Annell Lake Fish and Wildlife Management Area, 85 acres  
7 Alexander Creek Wildlife Management Area, 588 acres  
8 Cedar Ridge Preserve, 120 acres  
9 Stony Brook - Millstone Water, shed Association Reserve, 950  
10 Baldpate Mountain Park, 1,500 acres

Historical Landmarks

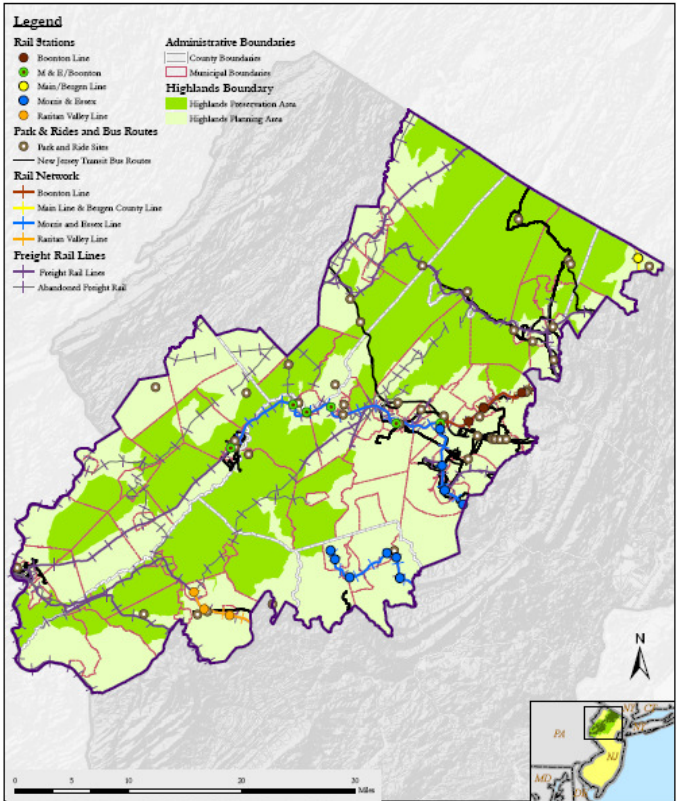
11 The 1752 Dirk Gulick House is home to the Van Werting Historical Society.  
12 Cat Tail Bridge and nearby Long Hill Road bridge were both built in 1825.  
13 Mr. Zion Methodist Church was constructed in 1843 and rebuilt in 1880. The African Methodist Episcopal Church was moved/rebuilt here in 1900.  
14 Highfields, the estate of Charles and Anne Lindbergh, was built in 1929.  
15 Hunt House was built by the Stout family, original settlers of the mountain.  
16 Built in 1860, Old Rocks Church remains open today.  
17 All periods of American architecture are represented in historic Lambertville.  
18 The Howell Living History Farm uses tools and techniques from 1680-1800.

Natural Features

20 Highest Elevation - 568 feet  
21 Devil's Half Acre, a storied and spectacular boulder field  
22 Roaring Brook, where Roaring Brook weaved through enormous boulders  
23 Rock Brook is stocked with trout.  
24 Killing Betty Brook, said to be haunted by the spirit of a girl who was here  
25 Three Brothers, a curious and well-known rock formation  
26 Pleasant Hill gave George Washington a strategic vantage point.  
27 Alexander Creek is noted for the exceptional purity of its water.  
28 Early travelers would cross the Devil's Half Acre to bypass local 18.



# Transit Network

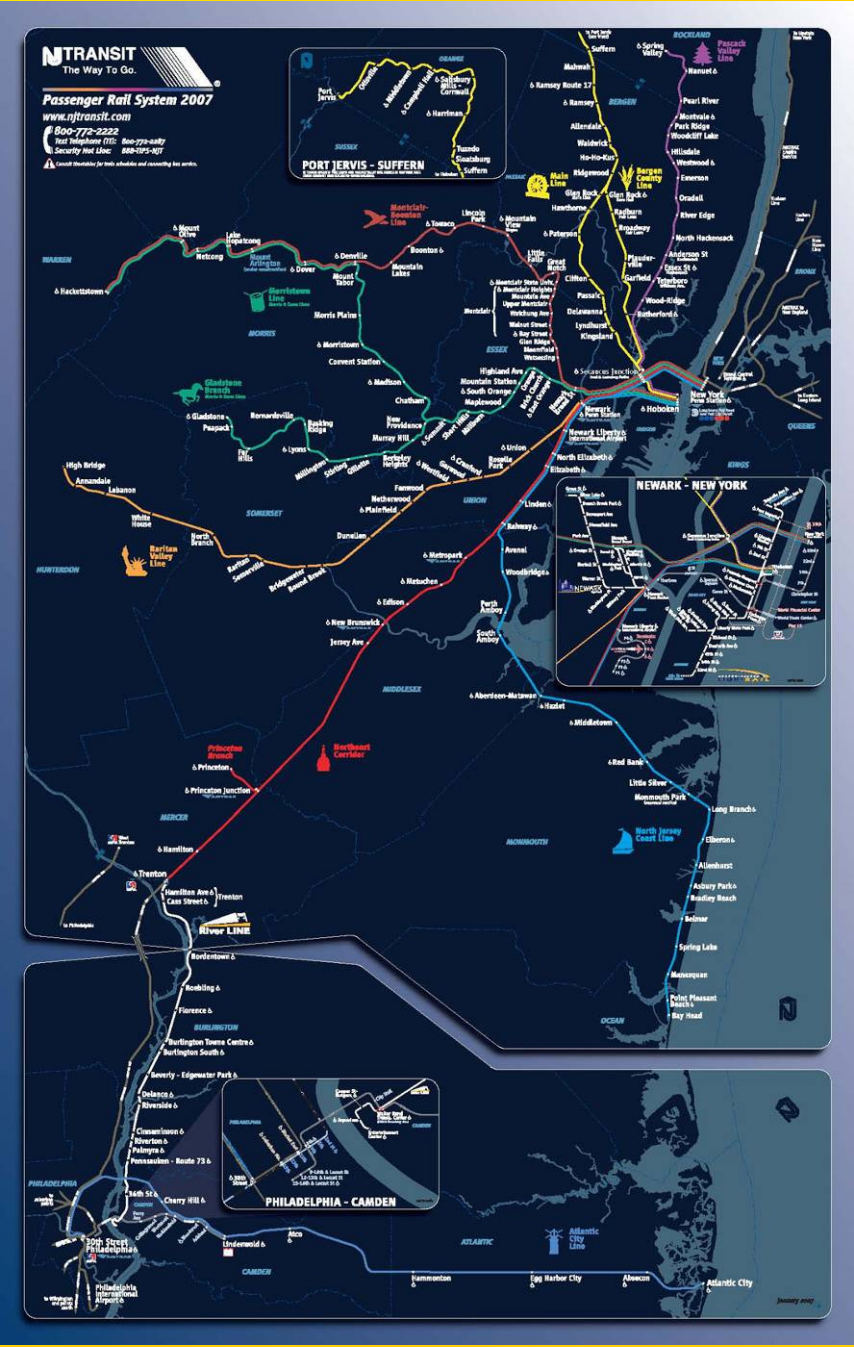


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**Draft Regional Master Plan, November 2006**



Sources:  
New Jersey Highlands Council, 2006  
New Jersey Department of Transportation, 2004  
New Jersey Transit, 2006





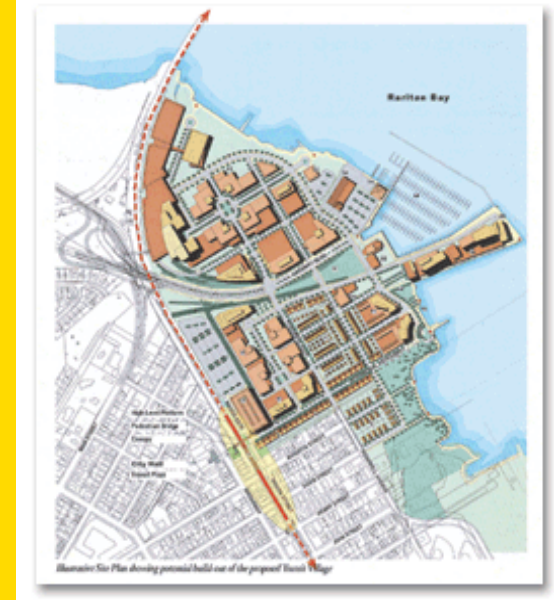
## Overview

The New Jersey Department of Transportation (NJDOT) and NJ TRANSIT spearhead a multi-agency Smart Growth partnership known as the Transit Village Initiative. The Transit Village Initiative helps to redevelop and revitalize communities around transit facilities to make them an appealing choice for people to live, work and play, thereby reducing reliance on the automobile.

The Transit Village Initiative is an excellent model for Smart Growth because it encourages growth in New Jersey where infrastructure and public transit already exist.

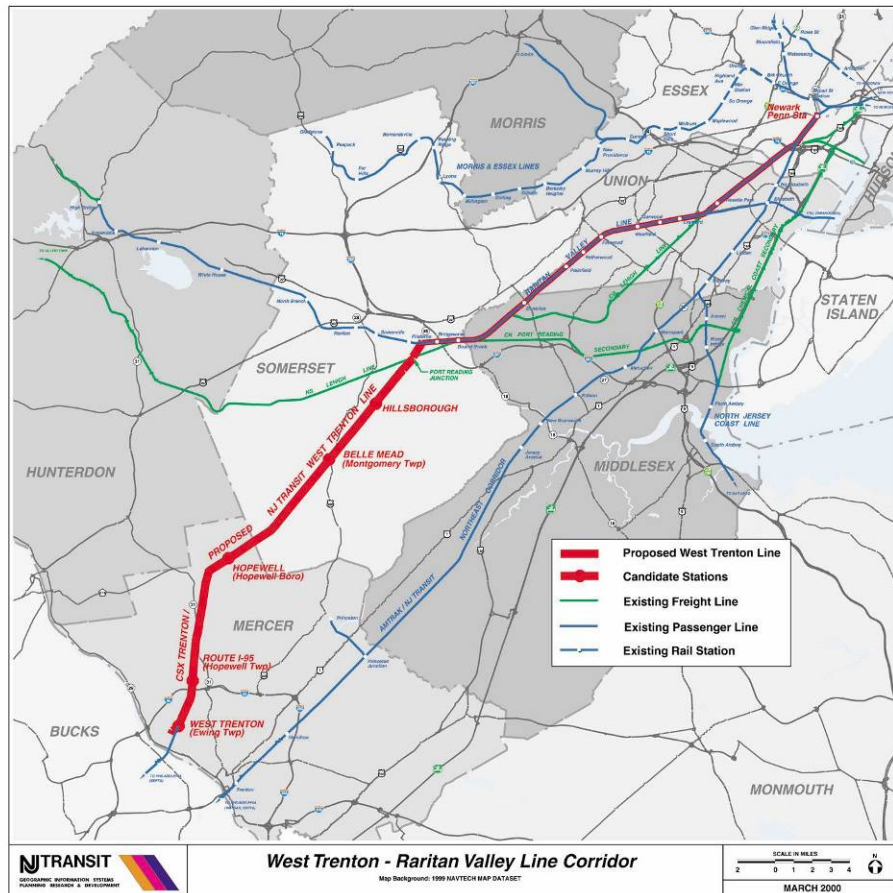
Aside from Smart Growth community revitalization, two other goals of the Transit Village Initiative are to reduce traffic congestion and improve air quality by increasing transit riders.

Studies have shown that an increase in residential housing options within walking distance of a transit facility, typically a one quarter to one half mile radius, does more to increase transit ridership than any other type of development. Therefore, it is a goal of the Transit Village Initiative to bring more housing, more businesses and more people into communities with transit facilities.



## How many designated Transit Villages are there?

There are currently 17 designated Transit Villages. They are Pleasantville (1999), Morristown (1999), Rutherford (1999), South Amboy (1999), South Orange (1999), Riverside (2001), Rahway (2002), Metuchen (2003), Belmar (2003), Bloomfield (2003), Bound Brook (2003), Collingswood (2003), Cranford (2003), Matawan (2003), New Brunswick (2005), Journal Square/Jersey City (2005) and Netcong (2005).



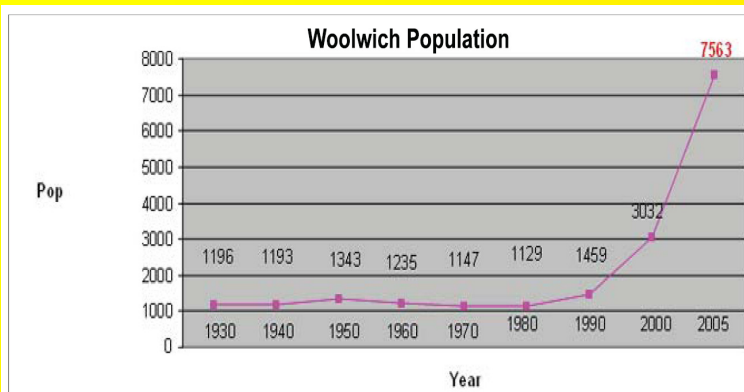
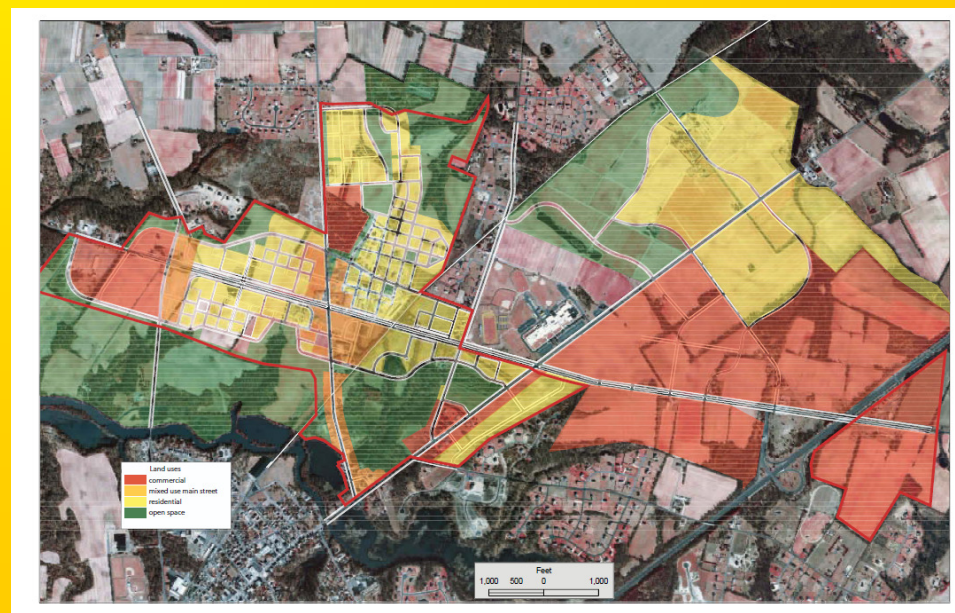
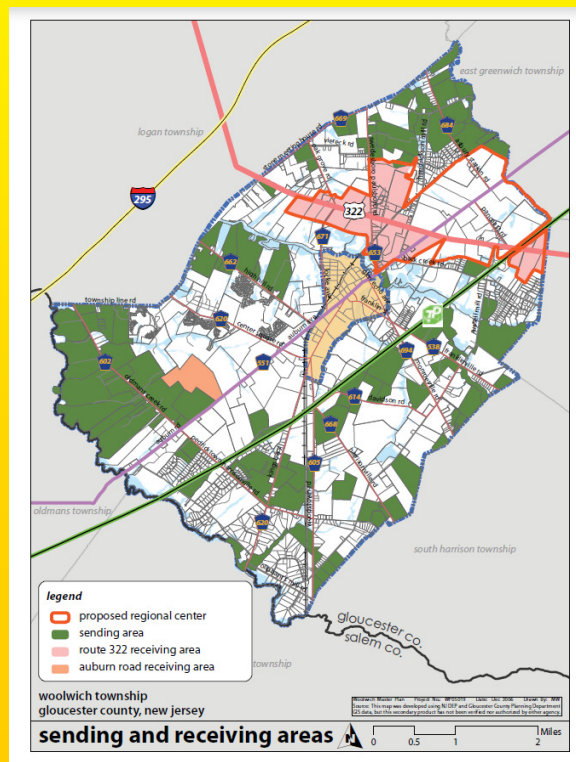
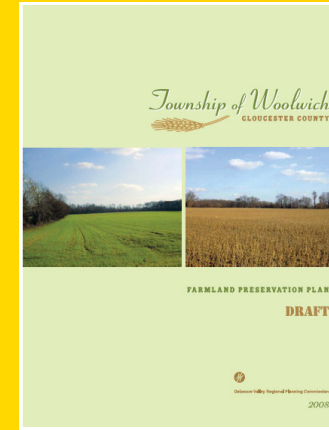
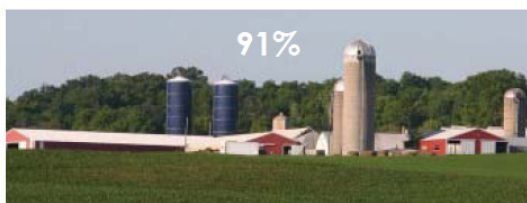


Figure 1. Woolwich Township Population: 1930 - 2005  
Source: U.S. Census





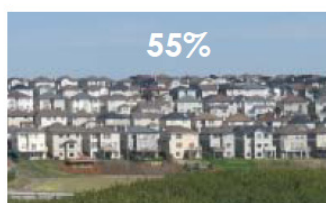
1990



2000



2050



## ECONOMICS HOUSING MIX CREDIT ALLOCATION

US 322 Corridor Receiving Zone

100 SFD  
1000 Twins  
1600 Townhouses / Flats  
500 (Flats above Stores)

Auburn Road

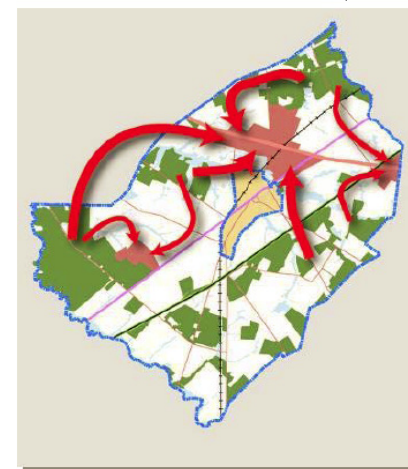
130 SFD  
162 Twins  
210 Townhouses

Woolwich New Town Credit Allocation

1.3 SFD = 1 credit  
1.8 Duplex or Twin = 1 credit  
2.8 Townhouse = 1 credit  
3.0 Urban Apt/Flat = 1 credit

Auburn Road Credit Allocation

1.6 Duplex or Twin = 1 credit  
2.5 Townhouse = 1 credit



melvin|kernan  
development strategies

### Population, Household, And Employment Projections Woolwich Township: 2005 – 2015 – 2025

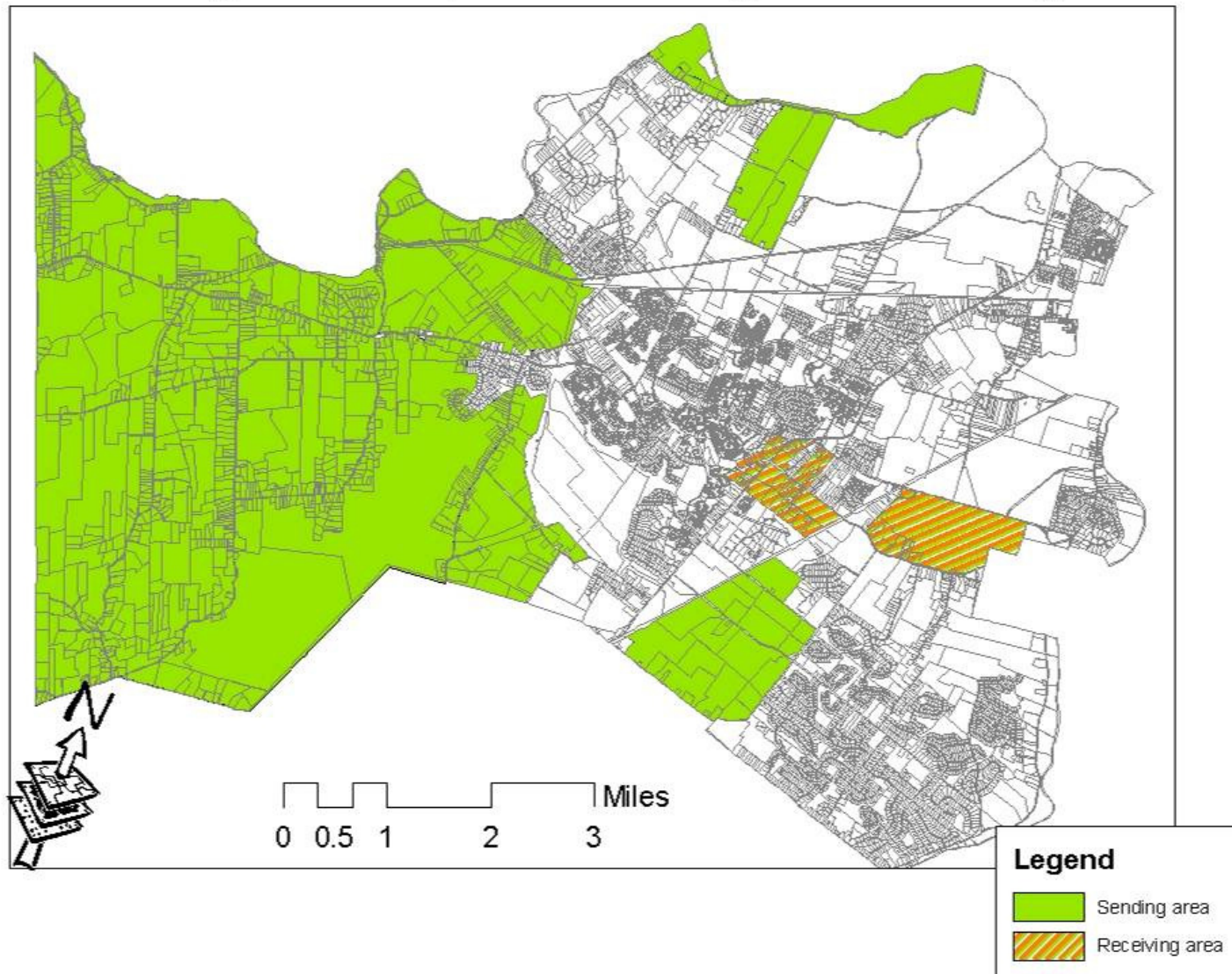
	2005	2015	2025	% Change 2005-2015	% Change 2015-2025
Population	7,563	21,188	30,573	180.2%	44.3%
Households*	2,703	7,438 - 7,530	11,315 – 11,733	176.9%	54.0%
Employment	1,165**	2,594	4,942	122.7%	90.5%

\*Range represents slight difference in projections prepared by melvin|kernan and those prepared by Urban Partners.

\*\*2005 employment estimate is based on DVRPC forecast.

# Hillsborough Township, Somerset County

Hillsborough Township TDR Sending and Receiving Areas



# Hillsborough Twp - Areas of Interest

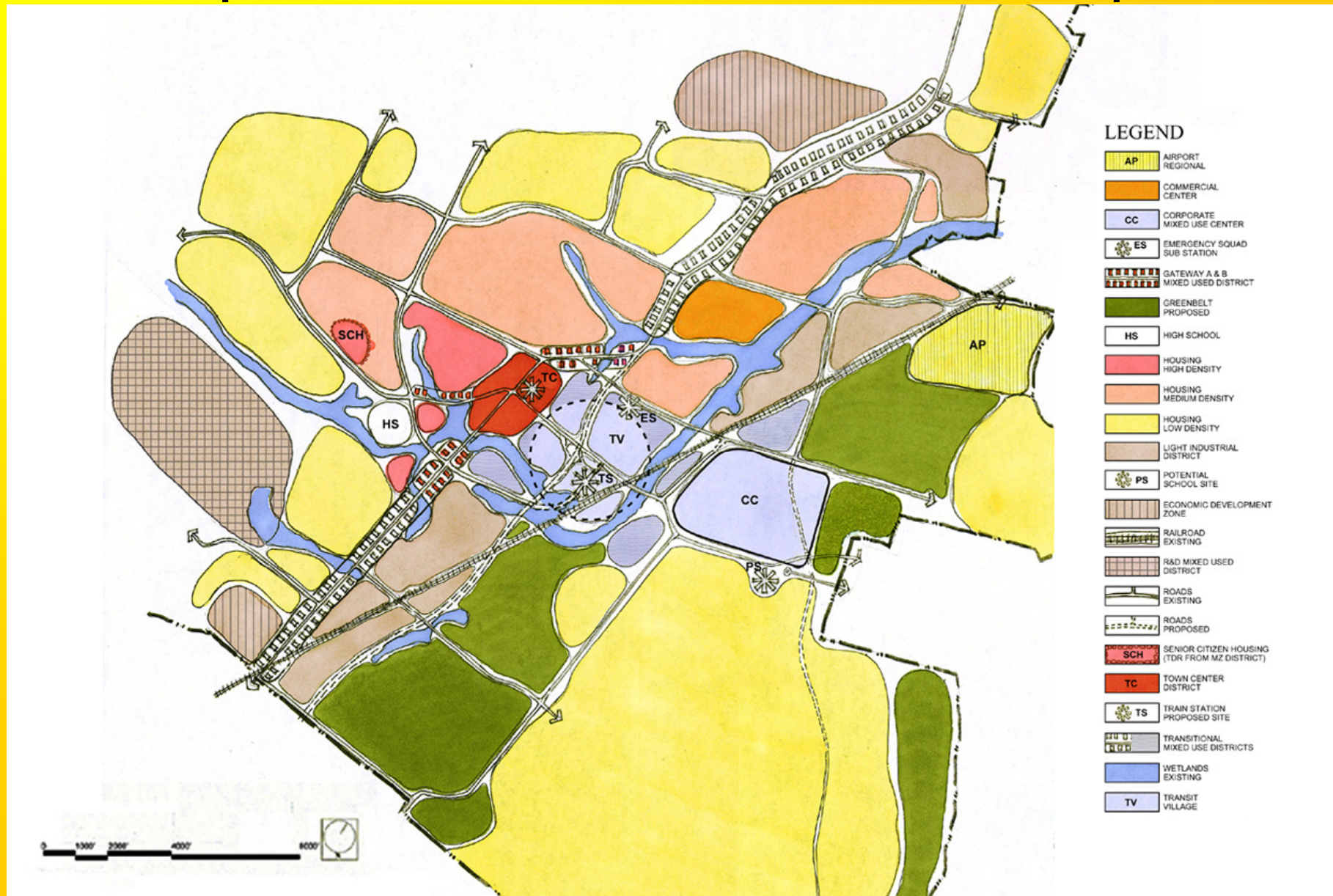


# Transit Village and Corporate Center

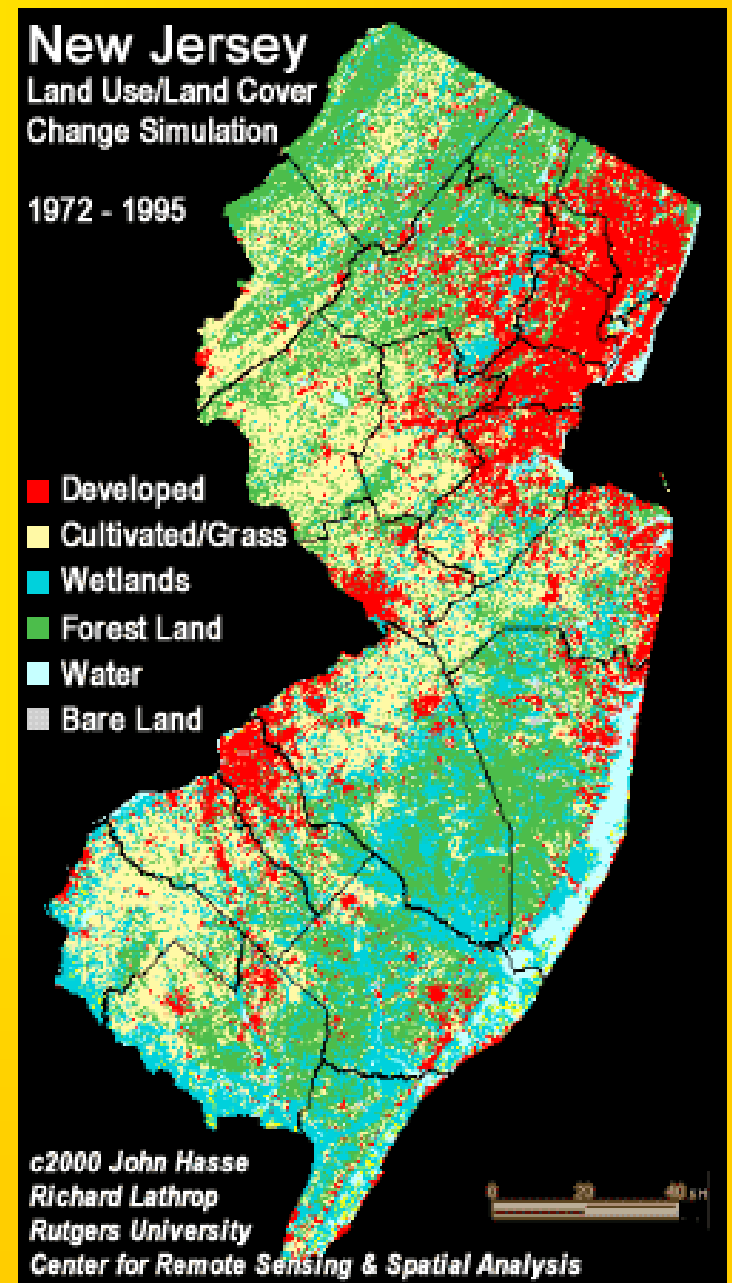
- Focus on 206 Bypass interchange and future train station
- Primarily employment centers
- Affordable housing as buffers to existing residential uses
- Use TDR to transfer density from remaining CDZ land
- Create open space buffer



# Proposed land use – schematic plan

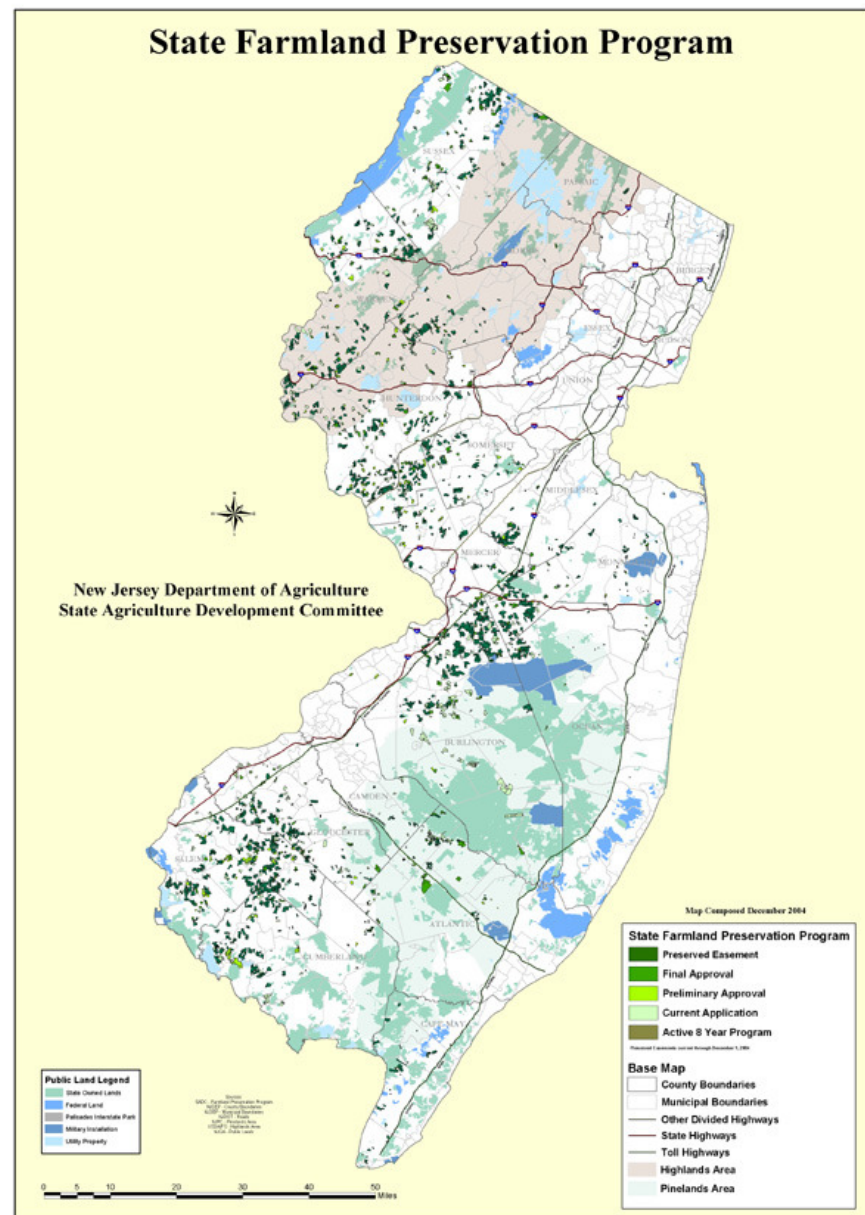


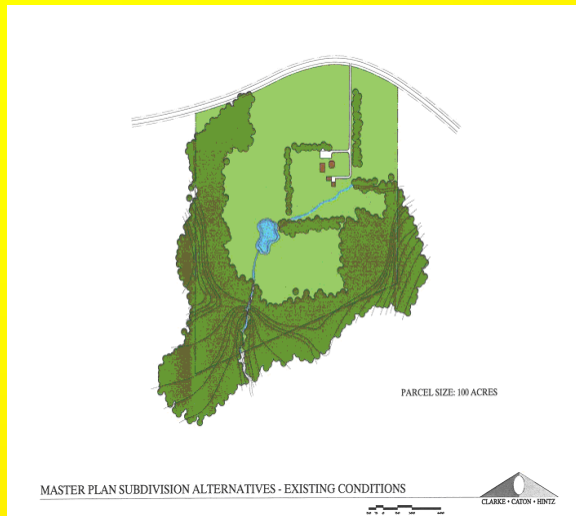
# The Planning Toolbox: Options for Agricultural Preservation



# 1. Purchase of Development Rights

- ❖ Voluntary Sale by Landowners
- ❖ Effective Equity Compensation
- ❖ Precludes Non-Agricultural Development
- ❖ Perpetual Deed of Easement
- ❖ Agricultural Development Areas Establish Geographic Focus
- ❖ 2,014 Farms / 191,789 Acres in 173 Municipalities Preserved to Date
- ❖ Uses Established SADC, CADB, Municipal PIG and Non-Profit Programs





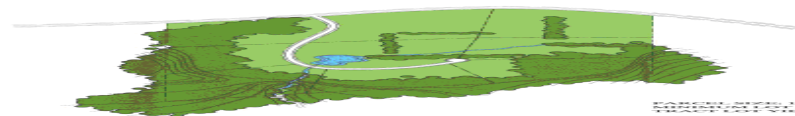
## 2. Large Lot Zoning / Downzoning

- ❖ Municipality Increases Minimum Lot Size
- ❖ Reduces Development Density, Usually Residential
- ❖ Sometimes Referred to as "Planned Sprawl"



MASTER PLAN SUBDIVISION ALTERNATIVES - CONVENTIONAL SUBDIVISION

0 10 20 30 40

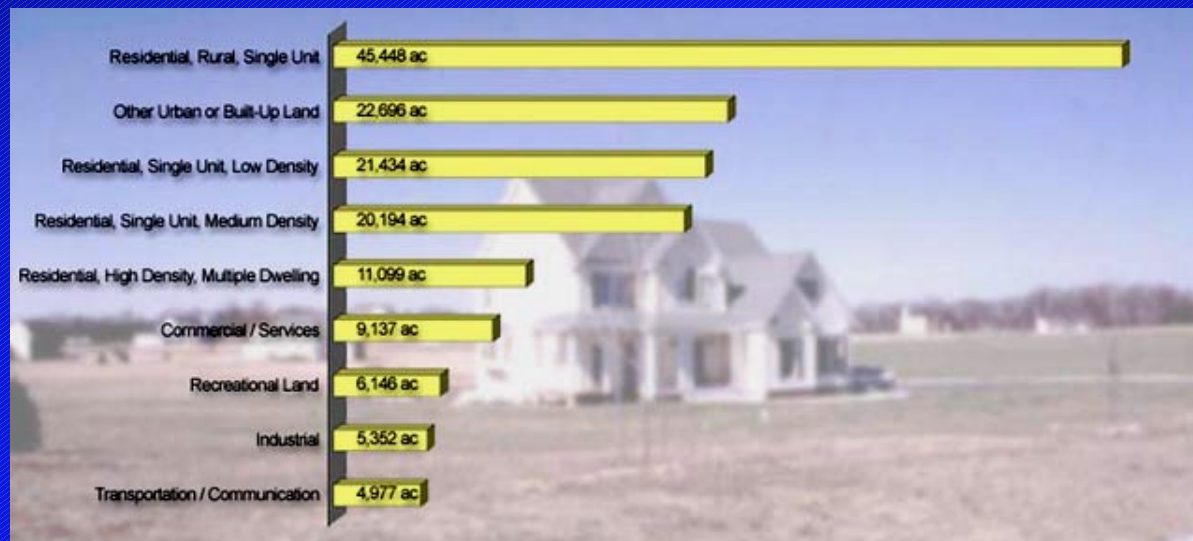


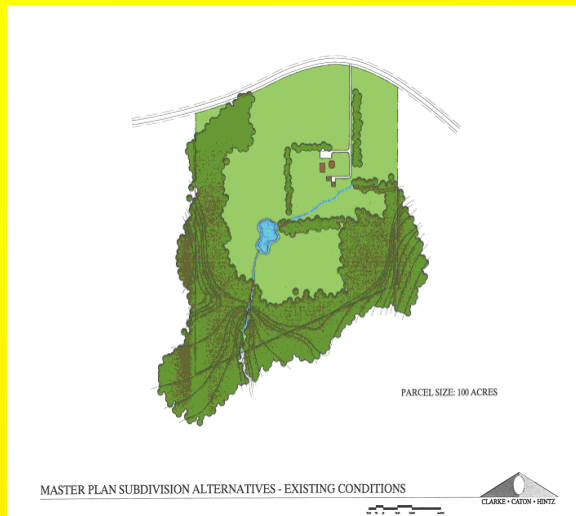
MASTER PLAN SUBDIVISION ALTERNATIVES - CONVENTIONAL SUBDIVISION

CLARKE • CATON • HINTZ

# *Large Lot Zoning Not the Answer*

Rutgers Land Use Study  
Acres Developed 1986 – 1995  
NJDEP Land Use / Land Cover Data





### 3. Cluster Zoning

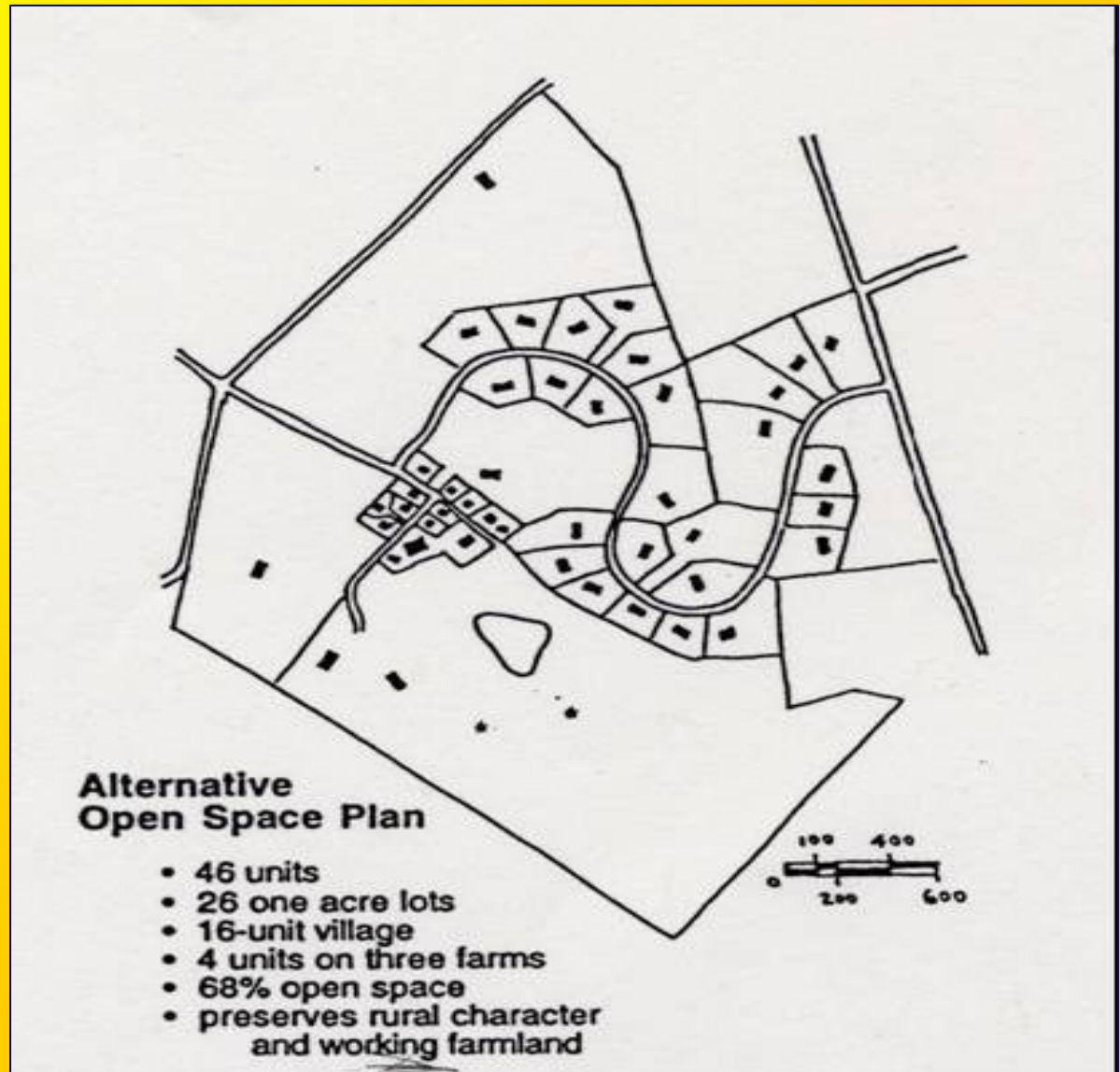
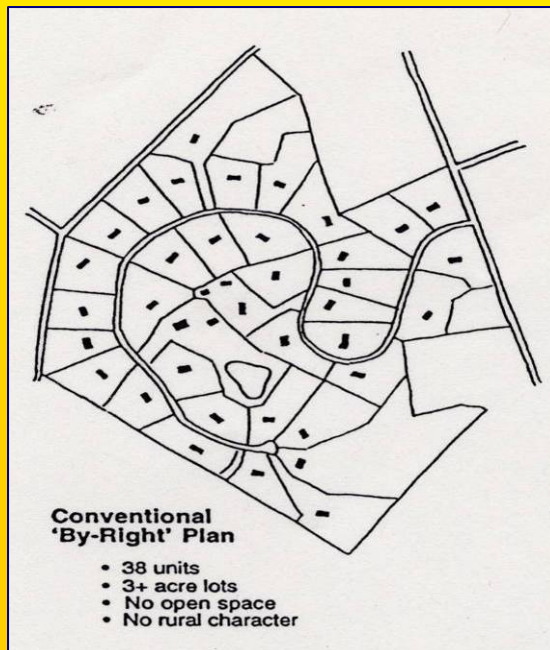
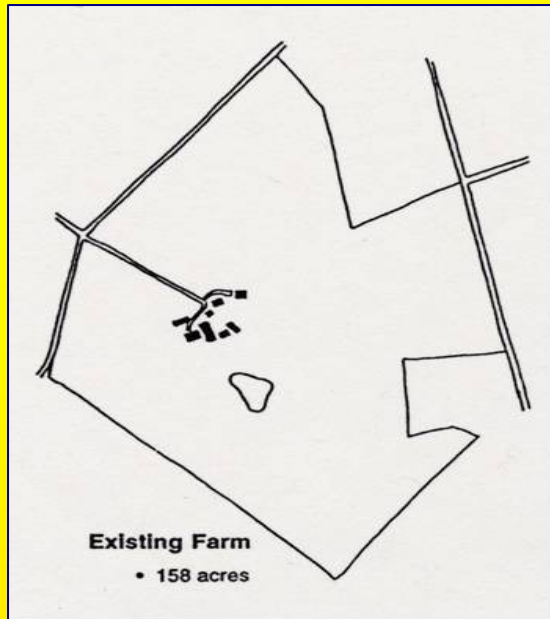
- ❖ Concentrates Development on a Portion of a Property
- ❖ Preserves Remainder of Property
- ❖ Can be Used for Agricultural, Environmental and/or Recreational Purposes
- ❖ Can be Implemented on a Voluntary or Mandatory Basis
- ❖ Can Include Lot Size Averaging and Open Lands Ratios



MASTER PLAN SUBDIVISION ALTERNATIVES - 1.5 ACRE CLUSTER PLAN



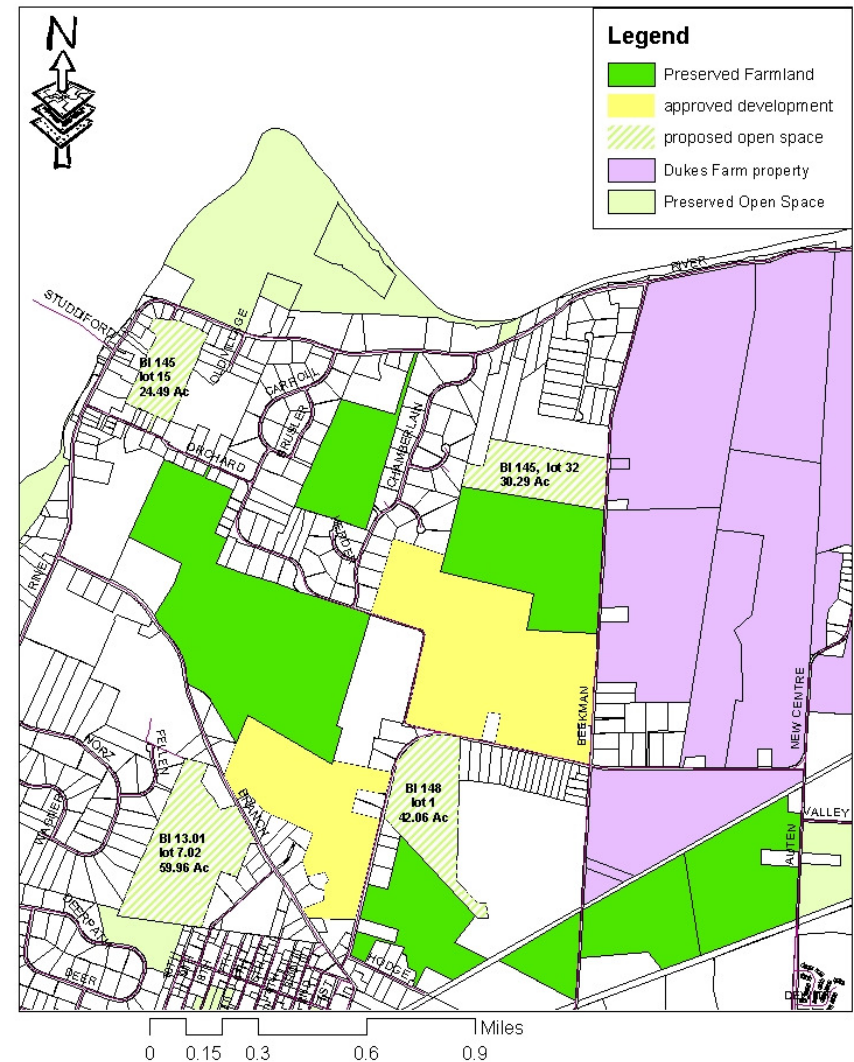
# Conventional vs. Cluster Development



## 4. Non-Contiguous Clustering

- ❖ Incorporated into Municipal Land Use Law in 1996
- ❖ One “Planned Development” Option
- ❖ Requires Coordination of Municipality, Landowners and Developer
- ❖ Sending Area Parcel(s) Permanently Preserved
- ❖ Receiving Area Parcel Developed At Higher than Normally Permitted Density
- ❖ Parcels may be Miles Apart
- ❖ Can Contribute to Center-Based Development
- ❖ May Require Density or Infrastructure Incentives

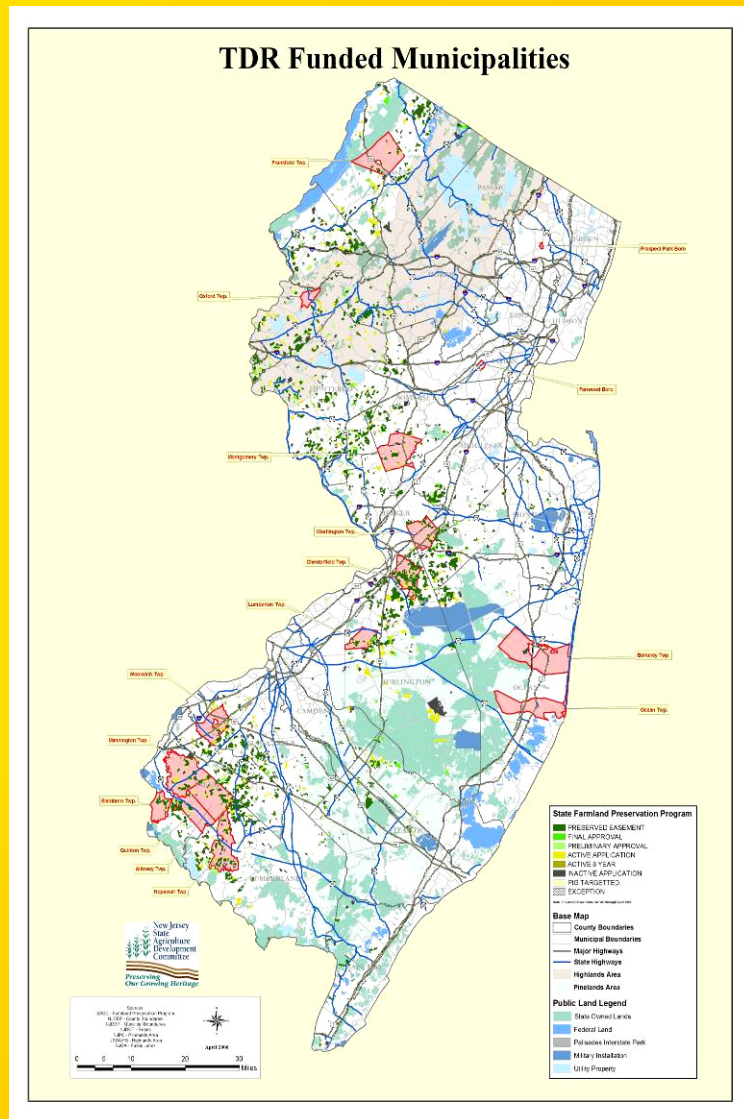
Flagtown South Branch Land Use Preservation  
August 2005



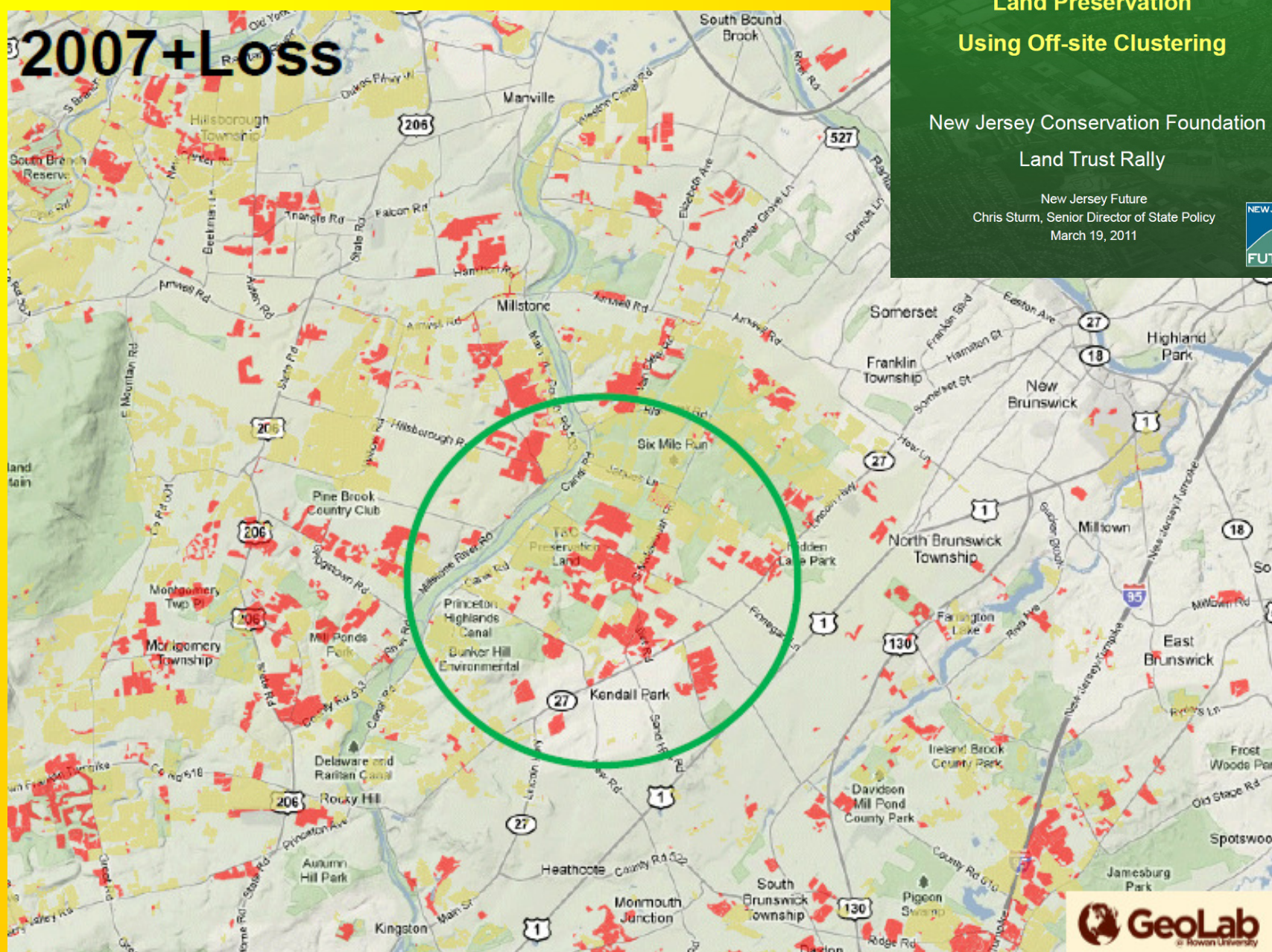
Hillsborough Township, Somerset County

## 5. Transfer of Development Rights

- ❖ A Municipal Planning and Preservation Tool / Realty Transfer Mechanism
- ❖ Used to Permanently Protect Agricultural, Historic and/or Environmental Resources while Accommodating Development in Well-Planned Receiving Areas
- ❖ Allows Landowners in Designated Sending Areas to Separate the Development Rights of Their Property from the Property Itself for Sale and Use in Receiving Areas
- ❖ Enables Developers who Purchase Development Credits to Build in Areas Deemed Appropriate for Growth at Densities Higher than Otherwise Permitted
- ❖ Protects Landowner Equity
- ❖ Can Provide Benefits to Landowners, Developers and Municipalities
- ❖ Relies on Private Transactions Between Landowners and Developers but Can Involve TDR Banks or Private Investors



# 2007+Loss



## Land Preservation Using Off-site Clustering

New Jersey Conservation Foundation  
Land Trust Rally

New Jersey Future  
Chris Sturm, Senior Director of State Policy  
March 19, 2011



# If we could go back in time... what planning tools could have been used?

Large lot zoning

Clustering

Noncontiguous clustering

Transfer of Development Rights (TDR)



Franklin Township, NJ. Google maps 2011

# Large Lot Zoning

Lot sizes are increased to reduce the amount of development on a parcel



Franklin Township, NJ., Google maps 2011. (Parcel boundaries are fictitious)

# Contiguous Clustering

Development is concentrated on a portion of the site, and the rest is preserved as open space



Franklin Township, NJ., Google maps 2011. (Parcel boundaries are fictitious)

## Noncontiguous Clustering

Municipality designates a zone or multiple parcels that a developer may use to create a single cluster. Sending parcels are permanently preserved.



Franklin Township, NJ., Google maps 2011. (Parcel boundaries are fictitious)

## Noncontiguous Cluster - Opportunities

- ✓ Affordable - Preserves land or historic sites with private funds
- ✓ Effective – More control than contiguous clustering
- ✓ Simple - Relatively easy and inexpensive to administer
- ✓ Fair - Provides landowners with another option to use development potential
- ✓ Promising – given Pinelands experience



## Noncontiguous Cluster - Limitations

- ✓ Voluntary and market-driven – Town may have to serve as a broker for landowners and developer
- ✓ More complex for developer - may require incentives
- ✓ Accelerated, higher density growth may generate opposition
- ✓ Hard to get water/wastewater approvals if sewer not in place
- ✓ Legal constraints



## Noncontiguous Clustering

A developer could cluster units from one parcel onto another parcel, which would be developed more intensely.



Franklin Township, NJ., Google maps 2011. (Parcel boundaries are fictitious)



## Noncontiguous Clustering

A developer could cluster units from multiple parcels onto one parcel, which is developed more intensely.



Franklin Township, NJ., Google maps 2011. (Parcel boundaries are fictitious)



## Transfer of Development Rights

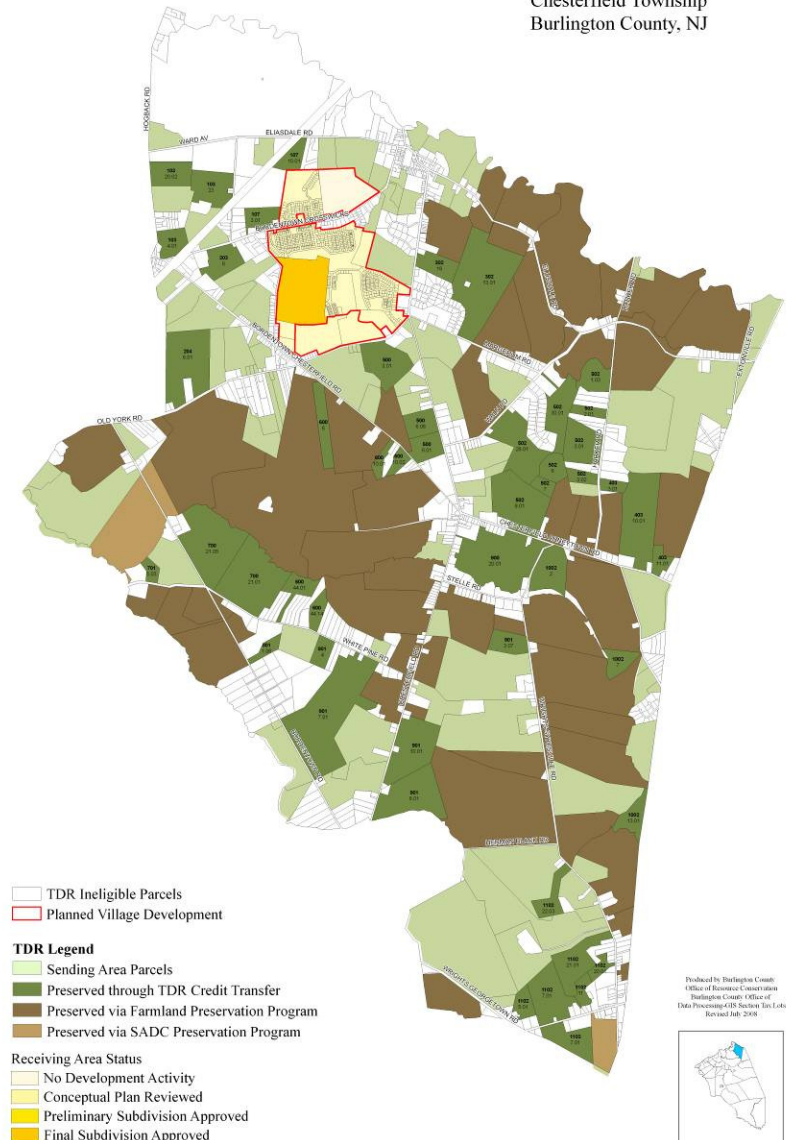
Larger scale. Developers build more densely in the designated growth area, if they purchase development rights from landowners in the preservation area



Chesterfield Township, NJ., Courtesy Clarke, Caton, Hintz.



## Transfer of Development Rights Current Status Chesterfield Township Burlington County, NJ

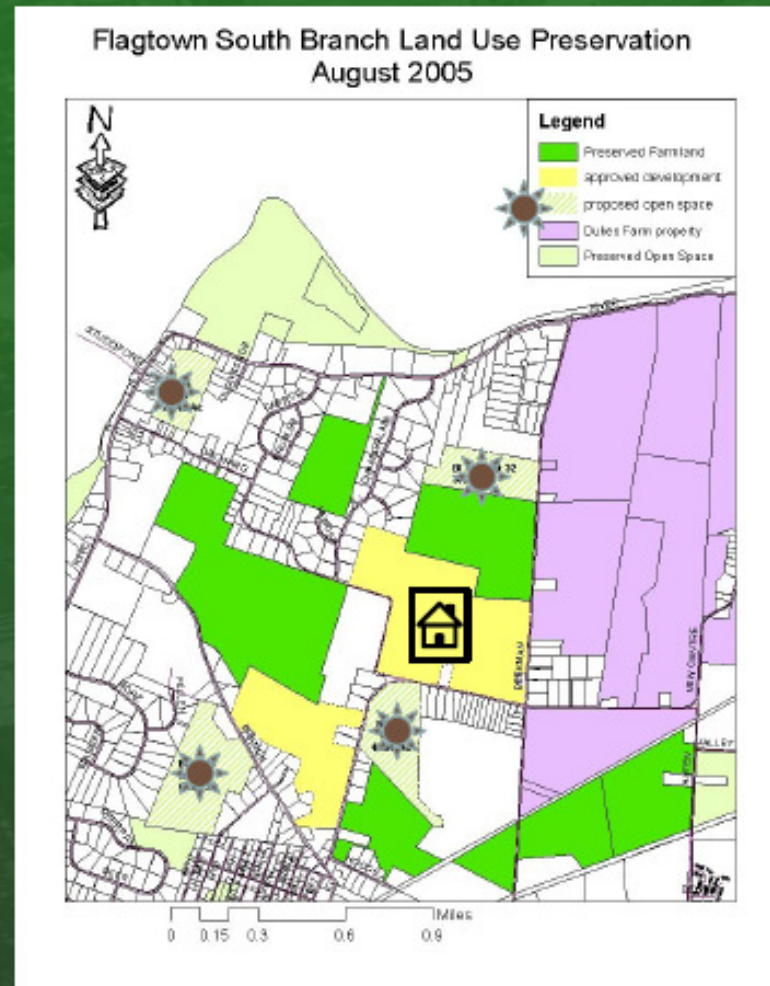


# Hillsborough example

Noncontiguous clustering  
used on five parcels for  
Hillsborough Chase project

- 105 homes under  
construction by Toll Brothers

157 acres on four parcels  
were permanently preserved  
and given to the township.  
Three are leased for farming  
and one is managed as bird  
habitat.



## Proposed MLUL Amendments to Make Noncontiguous Clustering Easier and More Effective

- ✓ Allow clustering of both residential and/or non-residential
- ✓ Simplify municipal planning obligations by not requiring creation of a “Planned Development”
- ✓ Allow for consolidation of sending and receiving lots for tax and stewardship purposes, as in the Pinelands
- ✓ Clearly authorize use for historic preservation
- ✓ Expand powers while distinguishing clearly from TDR
  - ✓ Allow towns to designate “receiving” areas for growth and “sending” areas for preservation
  - ✓ Do not allow towns to access TDR tools – allocation of development credits with the intent to create a market for their sale or access to the TDR Bank



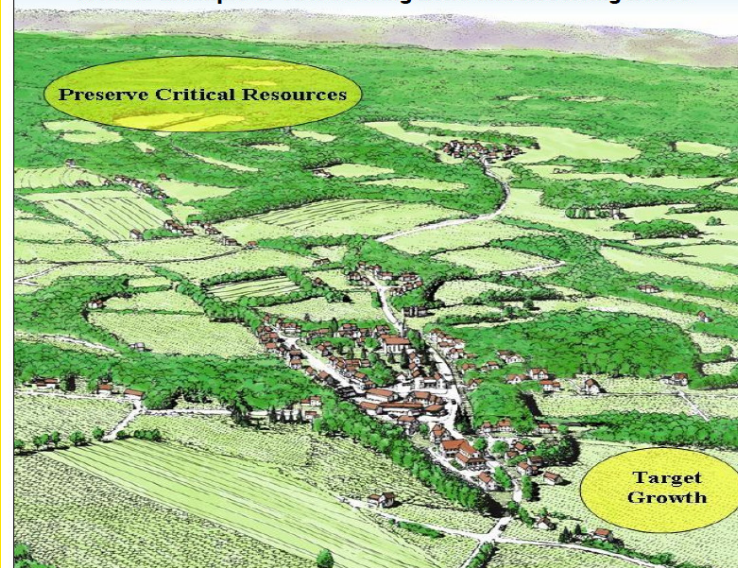
# Realizing the Promise: Transfer of Development Rights in New Jersey

A Report of the New Jersey TDR  
Statewide Policy Task Force



August 2010

**A Rural Example of TDR Sending Zone and Receiving Zones**



Source: New Jersey State Development and Redevelopment Plan, 2001

**Development Transfer Alternatives—Principle Elements**

Element	Non-Contiguous Cluster (recommended)	TDR	
		Voluntary <sup>1</sup> (recommended)	Mandatory (existing)
Real Estate Market Analysis (REMA)	No REMA <sup>2</sup>	Basic REMA "Economic Feasibility Analysis"	Full REMA
Severable Credits or Ownership	Easement or Fee Ownership	Severable Credits	Severable Credits
Credit Allocation	Local Option <sup>3</sup>	Required	Required
Transfer Ratio	Local Option	Yes	Yes
Designated Receiving and Sending Area(s)	Local Option	Yes	Yes
Sewage Treatment Required	Local Option	Yes	Yes
Receiving Area sized to utilize Sending Area Credits	Local Option	Yes - at least 75%	Yes - 100%
Maximum Lot Size in Receiving Area	Local Option <sup>4</sup>	Yes	Yes
Provisions for Regulatory Predictability	No	To Be Determined	Yes
State Role in Transfer	State Cooperation <sup>5</sup>	State Partnership / Endorsement	State Partnership / Endorsement
Performance / Sunset Requirements	No	No	Yes



Salem County TDR  
Task Force  
March 10, 2010

## Salem County Population Projected Rates 2007-2030

<b>Salem County</b>	<b>7.3%</b>
Alloway township	24.7%
Carneys Point township	5.4%
Elmer borough	-3.0%
Elsinboro township	-3.8%
Lower Alloways Creek township	11.4%
Mannington township	1.5%
Oldmans township	0.1%
Penns Grove borough	-4.5%
Pennsville township	-1.3%
Pilesgrove township	20.1%
Pittsgrove township	18.3%
Quinton township	3.7%
Salem city	-3.5%
Upper Pittsgrove township	17.9%
Woodstown borough	19.5%

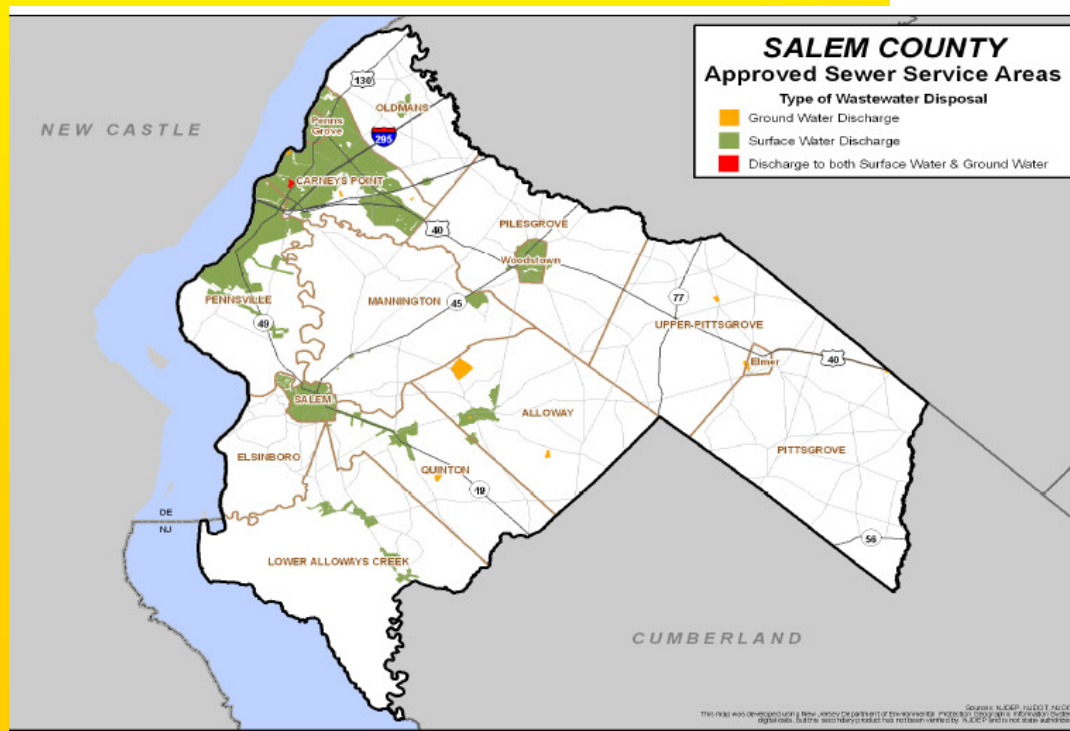
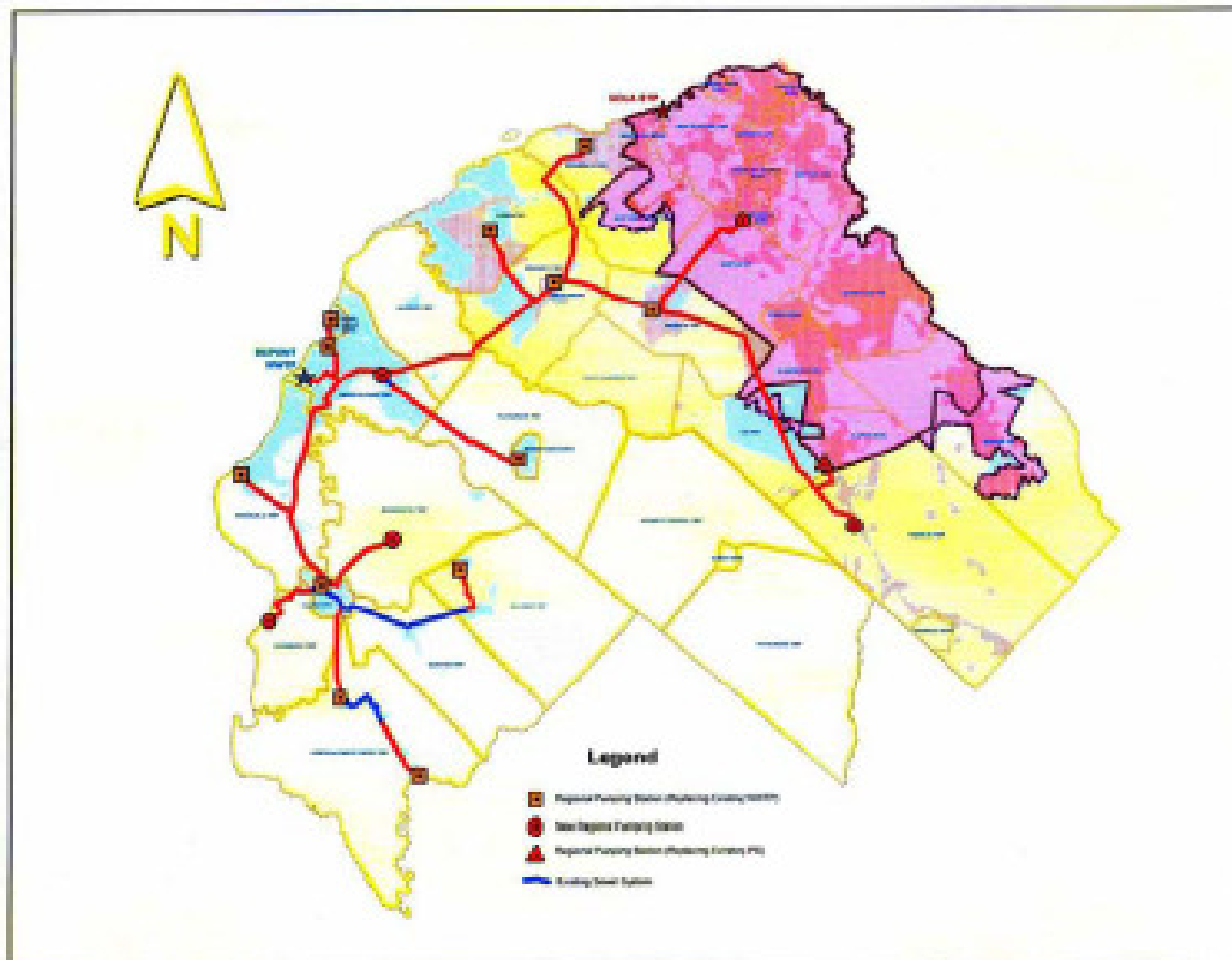




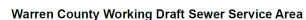
Figure 1: Gloucester-Salem Regional Alternative



CHURCHILL

Figure 2  
Regional Interceptor Systems  
Gloucester & Salem Counties

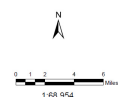
# Water Quality Management Planning

[illegible]

This map is to be used for general information purposes only. The sewer service areas depicted on this map are working drafts and have not been adopted by the New Jersey Department of Environmental Protection.

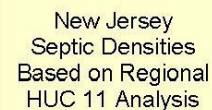
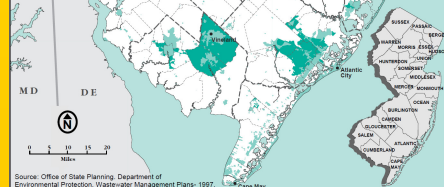
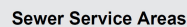
Some draft sewer service areas depicted on this map were developed by approximating locations from paper maps submitted to the Department of Environmental Protection. Some of the draft sewer service areas were developed removing areas of 25-acres or larger of contiguous environmentally sensitive areas from the Department's adopted sewer service areas. The Department is not responsible for a sewer service area without municipality quality control. As a result of these limitations, the user needs to be aware that the map may not accurately represent municipal level digital data. No claim of representation concerning these draft sewer service areas that exceed the above limitations.

At the municipal level, additional mapping steps need to be completed to finalize the draft sewer service areas. The draft sewer service areas on this map are approximate at a regional level. For detailed boundary determinations refer only to the municipal prepared draft sewer service areas.



February 2011

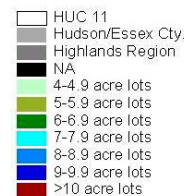
Prepared By: NJDEP - Division of Land Use Planning



Assumptions:

\*All of lot goes toward recharge (e.g., assumptions re: %-impervious cover)

\*Nitrate Loading = 10 lbs. per person per year and 3 persons per household

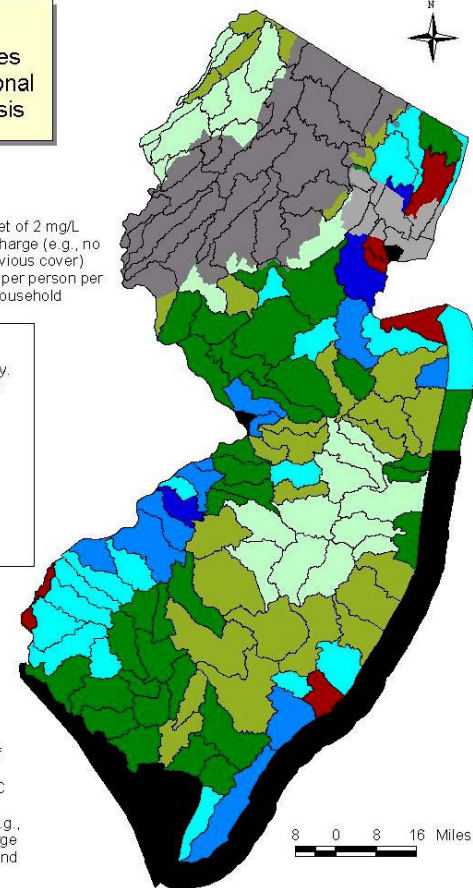


Other Notes:

\*Highlands are grayed out due to being subject to stricter requirements.

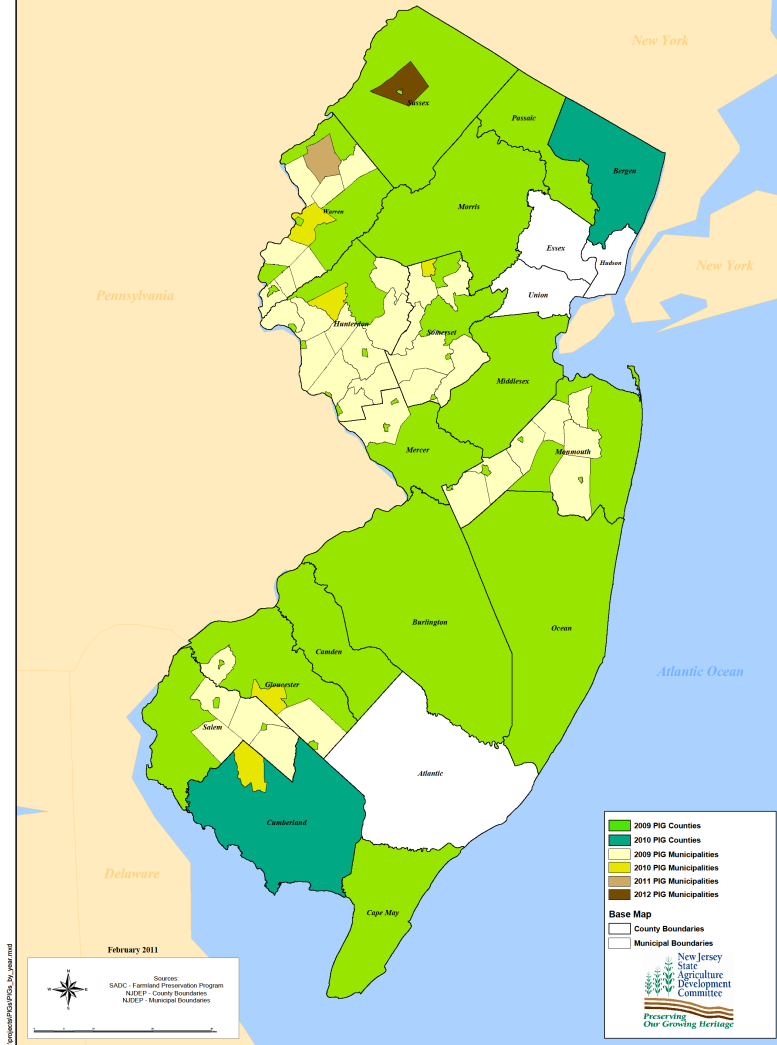
\*Hudson & Essex County grayed out due to inadequate soils data at time of

\*NA: Multiple coastal HUC 11s contain vast areas of water or other features (e.g., Urban land) where recharge = 0, which overly skews and invalidates model results.



# 2012 County and Municipal Planning Incentive Grant Application Summary

## SADC Planning Incentive Grant Program



County/ Municipality	# of Project Areas	# of Targeted Farms	Targeted Farms Acreage	Estimated Total Cost in Millions	Project Area Acreage	1-Year Acreage Goal	5-Year Acreage Goal	10-Year Acreage Goal	Dedicated Tax \$0.02/\$100	Annual Tax Revenue in Millions	Annual Tax for Farmland Preservation in Millions
Bergen	8	40	525	\$67,237	10,887	30	150	300	1.0	\$19,000	No Set Amount
Burlington	4	201	24,896	\$100,000	111,761	1,000	5,000	10,000	4.0	\$20,000	No Set Amount
Camden	5	57	5,459	\$30,843	15,071	702	2,569	3,470	2.0	\$7,600	No Set Amount
Cape May	5	198	13,172	\$357,258	16,055	299	1,097	1,976	1.0	\$4,400	No Set Amount
Cumberland	16	476	19,392	\$75,334	58,283	1,050	5,250	10,500	1.0	\$9,970	No Set Amount
Upper Deerfield	1	57	3,958	\$17,838	9,233	396	1,979	3,958	0.0	\$0,000	\$0,000
Gloucester	11	30	2,194	\$30,894	112,929	1,000	5,000	10,000	4.0	\$11,000	\$5,000
Elk	2	30	1,005	\$11,050	3,520	75	377	754	1.0	\$0,038	\$0,038
Franklin	5	135	5,272	\$31,413	10,106	598	1,799	3,290	1.0	\$0,076	No Set Amount
Woodwich	3	74	4,071	\$81,846	5,139	415	2,070	4,134	5.0	\$0,280	Up to \$0,280
Hunterdon	7	102	12,448	\$158,000	178,126	1,500	7,500	15,000	3.0	\$7,000	\$2,000
Alexandria	4	35	1,113	\$8,902	16,667	150	750	1,500	4.0	\$0,314	No Set Amount
Delaware	2	22	1,090	\$21,946	23,707	950	2,500	5,000	6.0	\$0,540	No Set Amount
East Amwell	1	20	1,720	\$22,360	13,523	170	699	1,720	4.0	\$0,315	\$0,315
Franklin	1	18	1,494	\$21,800	4,246	30	750	1,494	5.0	\$0,275	\$0,200
Holland	4	30	2,599	\$25,987	11,335	250	1,250	2,500	2.0	\$0,079	\$0,079
Kingwood	1	28	2,021	\$20,206	12,545	175	822	1,645	3.0	\$0,182	No Set Amount
Hartens	4	25	1,554	\$31,079	6,111	100	300	600	1.5	\$0,082	No Set Amount
Roadkington	1	30	2,313	\$41,534	15,759	1,000	5,000	10,000	2.0	\$0,570	No Set Amount
Tewksbury	3	3	439	\$2,700	4,557	100	300	1,000	5.0	\$0,420	No Set Amount
Union	3	22	701	\$8,106	3,791	70	325	650	2.0	\$0,137	\$0,107
West Amwell	1	6	510	\$7,320	10,440	100	100	610	6.0	\$0,315	No Set Amount
Mercer	7	30	2,806	\$64,237	147,43	100	600	1,200	3.0	\$5,500	No Set Amount
Popwell	1	11	958	\$28,734	107,61	95	380	479	2.0	\$1,545	No Set Amount
Middlesex	5	129	5,108	\$193,665	20,633	225	1,125	2,250	2.0	\$1,000	No Set Amount
Monmouth	6	136	13,283	\$432,912	60,598	1,200	5,000	8,000	1.5	\$17,500	No Set Amount
Colts Neck	1	6	262	\$13,254	9,321	50	80	302	2.5	\$0,778	No Set Amount
Holmdel	1	16	587	\$27,182	2,568	10	70	338	2.5	1,144	No Set Amount
Howell	3	12	635	\$10,900	24,294	127	370	463	2.0	\$1,396	\$0,700
Marlapan	1	32	1,447	\$29,487	9,223	145	724	1,447	2.0	\$1,132	No Set Amount
Marlboro	3	17	588	\$36,700	19,690	45	312	588	2.0	\$0,625	No Set Amount
Milstone	4	62	4,038	\$121,100	12,359	716	1,116	1,716	6.0	\$0,830	No Set Amount
Upper Freehold	1	207	10,390	\$207,800	27,258	550	1,000	1,500	4.0	\$0,328	No Set Amount
Morris	3	79	6,025	\$177,930	169,342	610	2,974	6,025	2.0	\$23,000	\$5,250
Ocean	7	151	3,252	\$84,287	21,575	200	901	1,523	1.2	\$10,000	No Set Amount

County/ Municipality	# of Project Areas	# of Targeted Farms	Targeted Farms Acreage	Estimated Total Cost in Millions	Project Area Acreage	1-Year Acreage Goal	5-Year Acreage Goal	10-Year Acreage Goal	Dedicated Tax \$0.02/\$100	Annual Tax Revenue in Millions	Annual Tax for Farmland Preservation in Millions
Passaic	1	5	116	\$4,546	6,415	100	500	1,000	1.0	\$5,200	\$0,700
Salem	3	164	5,247	\$50,848	80,125	2,000	13,000	25,000	2.0	\$1,157	\$1,157
Alway	1	7	385	\$3,976	5,055	200	400	600	2.0	\$0,058	\$0,020
Pittsgrove	3	41	4,459	\$25,000	7,297	214	962	1,808	3.0	\$0,145	\$0,145
Pittsgrove	2	89	3,199	\$22,889	7,290	468	1,312	2,399	3.0	\$0,178	No Set Amount
Upper Pittsgrove	4	20	1,000	\$7,500	1,000	200	500	1,000	2.0	\$0,070	\$0,070
Somerset	12	400	15,764	\$250,214	87,623	1,000	4,000	5,000	3.0	\$19,140	\$1,400
Bedminster	1	123	5,913	\$177,410	10,111	500	2,706	2,706	2.0	\$0,522	No Set Amount
Barnards	1	25	538	\$40,323	3,798	165	165	200	4.0	\$0,030	No Set Amount
Barnsburg	1	23	737	\$46,535	1,073	154	266	737	6.0	\$1,509	No Set Amount
Franklin	2	25	1,190	\$24,379	17,422	130	650	1,190	5.0	\$4,000	No Set Amount
Hillsborough	3	36	1,586	\$33,751	9,860	100	500	1,000	4.1	\$1,478	\$0,300
Montgomery	1	22	1,881	\$32,432	20,546	116	395	580	4.0	\$1,500	No Set Amount
Freepack & Gladstone	2	9	271	\$9,499	1,932	20	80	150	3.0	\$0,248	\$0,124
Sussex	10	730	30,440	\$220,189	176,195	2,548	13,240	25,480	0.65	\$1,200	\$1,000
Frankford	4	102	4,438	\$27,745	10,142	75	358	700	3.0	\$0,080	\$0,080
Warren	7	382	29,347	\$152,934	153,719	2,840	14,700	29,400	6.0	\$7,800	\$4,500
Blairsville	4	78	2,140	\$14,977	12,307	180	900	1,700	3.5	\$0,320	\$0,320
Franklin	4	104	6,142	\$50,206	9,455	250	1,204	2,299	6.5	\$0,270	No Set Amount
Fredericksburg	7	82	3,511	\$22,813	9,483	100	500	1,000	2.0	\$0,095	\$0,095
Greenwich	1	18	1,832	\$36,540	3,453	130	480	1,832	4.0	\$0,237	\$0,130
Hermity	3	107	4,260	\$23,700	12,414	250	1,200	1,900	5.0	\$0,547	\$0,247
Hess	3	33	2,544	\$5,108	6,384	100	500	1,000	2.0	\$0,063	\$0,063
Knowlton	2	62	3,477	\$28,581	13,355	190	550	1,000	2.0	\$0,061	\$0,061
Phelpsburg	4	105	3,313	\$33,100	6,306	1,015	1,763	1,955	5.0	\$0,155	\$0,155
White	4	112	4,661	\$23,416	13,599	150	700	1,300	2.0	\$0,125	No Set Amount
<b>County Totals (17)</b>	<b>118</b>	<b>3,469</b>	<b>196,487</b>	<b>\$2,441</b>	<b>1,294,510</b>	<b>17,254</b>	<b>82,306</b>	<b>158,024</b>		<b>\$196,967</b>	
<b>Municipal Totals (44)</b>	<b>108</b>	<b>2,131</b>	<b>105,651</b>	<b>\$1,535</b>	<b>441,375</b>	<b>9,386</b>	<b>34,640</b>	<b>63,803</b>		<b>\$24,914</b>	

Note: In some cases County and Municipal project areas overlap. Identified terms may appear on both County and Municipal term lists.

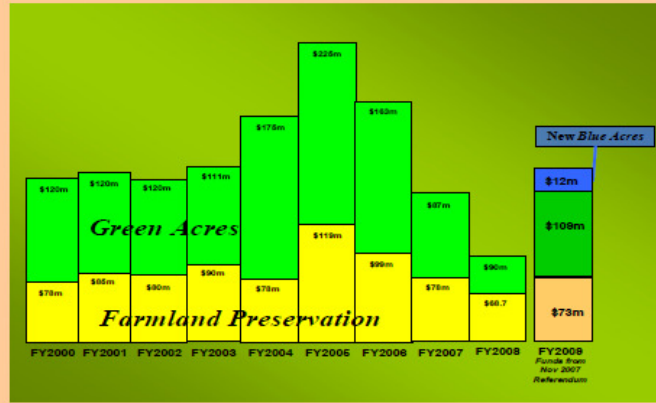
Note: Data in red reflect 2009/2010 data. These are applications that did not submit 2011 round applications.

Date: 4/25/11



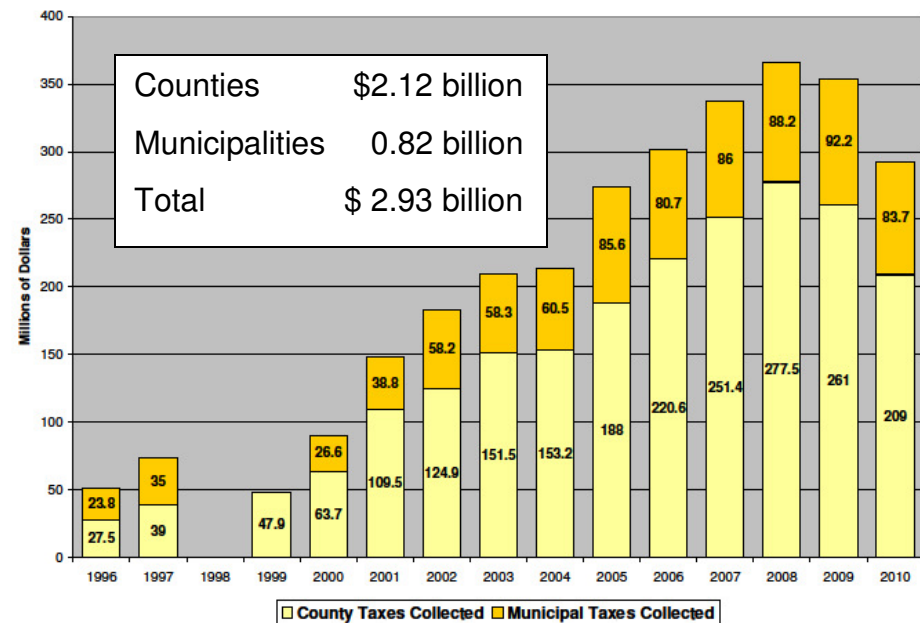
## Garden State Preservation Trust

### GSPT Land Conservation Appropriations



# Future Funding

### NJ County and Municipal Open Space and Farmland Preservation Taxes Collected



# Trends to Watch For .....

- More State, Regional and County Planning
- Identification of Smart Growth Areas (Transit Villages, Centers, Clustered Development)
- More Creative Municipal and NJDEP Regulations
- More Housing Options (Affordable, Smaller, Age-Restricted, Rentals, Multi-Family)
- More Coordinated Preservation Projects (Open Space, Farmland, Recreation and Historic Preservation)
- Access to Fresh Produce (Community Markets, CSAs, Direct Sales)
- Renewable Energy Proposals on Preserved and Unpreserved Farms

**For More Information or Questions:**

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SADC Planning Manager  
609 / 984 – 2504  
timothy.brill@ag.state.nj.us

